The Mining Journal
RAILWAY AND COMMERCIAL GAZETTE
FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 359. --Vol. XII.] LONDON: SATURDAY, JULY 9, 1842. [Price 6d.

STANNARIES OF CORNWALL.
IN THE VICE-WARDEN'S COURT.
COWARD v. RICHARDS AND ANOTHER.

WHEREAS, the Vice-Warden did, by two several orders or decrees made in the abovementioned cause, and bearing date respectively the 29th day of January, 1840, and the 7th day of May last, order that a sale be made of (amongst other things) the MACHINERY and MATERIALS upon, and belonging to, GUNNIS LAKE MINE, in the parish of Calstock, within the said Stannaries, under the direction of the registrar of the court, and that the proceeds of such sale should be applied by the said registrar in the manner directed by the same orders or decrees.—Notice is hereby given, that, pursuant to the said orders or decrees, a PUBLIC AUCTION will be holden at Gunnis Lake Mine, aforesaid, on Tuesday, the 16th of July, at Eleven o'clock in the forenoon, for selling, either together or in lots, the undermentioned mining machinery and materials—viz., a STEAM-ENGINE, 40-inch cylinder, with cast iron beam, two boilers about twenty tons, caps and brasses, a balance-bob; a STEAM-ENGINE, 36-inch cylinder, piston and rod condensing work, nozzles and eduction pipes, hand gear, parallel motion, brass bearings and valves, &c., complete; and a STEAM-WHIM ENGINE, 18-inch cylinder, with cage, span beam, upright stays, &c., two water-wheels, one 14-feet diameter, with stamps for three heads and lifters; another with angle-bob and shaft-bob; a water-wheel axle with sockets and cranks, and sundry old axles; capstan and shears complete; a small capstan, two pulleys, and frame; a capstan rope, 130 fathoms of 12-inch, two flat ropes, 130 fathoms each; several poppet heads, pulley stands, and stays, four feet flat rope, shieves, and four feet 22-inch flat rope pulleys, several horse whims, with poppet-heads, whim chains. The following pumps:

Three 9-feet 11-inch.	Twenty 9-feet 9-inch.
Eleven 9-feet 10-inch.	Fourteen 9-feet 6 and 7-inch.
Two 9-feet 9-inch.	Eight 9-feet 6-inch.
Forty-three 9-feet 8-inch.	One 3-feet 6-inch.

with working hand door pieces, brass working barrels, plunger-poles and cases, clack-pieces, and windbores to match, stuffing boxes and glands, wrought-iron rails (forty-two fathoms), with sleepers and saddles, thirty iron air-pipes, about nine tons of rod-plates and bolts, tram-waggons, chains, main-rods, 126 fathoms of 8 and 10-inches square, horizontal and hanging rods, a quantity of rod and other timber, several machine and winze kibbles, pulleys and frames, ladders, a large quantity of old brass and iron, two smith's bellows, 40 and 26-inch, two anvils and vice, one brass and one iron bell and stand, screw stocks, smith's and miner's tools, miner's chests, counting-house furniture, &c.

For viewing the same, application may be made to Captain George Bennetts, at the mine; and for further particulars (if by letter, pre-paid), to Mr. Stokes, solicitor, Truro.—Dated the 29th day of June.

MINERAL PROPERTY.—TO BE PEREMPTORILY SOLD, pursuant to an order of the High Court of Chancery, made in a cause "Ley v. Ley," with the approbation of John Edmund Dowdeswell, Esq., one of the Masters of the said court, by Mr. JOHN MUSGROVE, at the Auction Mart, in the city of London, on Monday, the 25th day of July instant, at Twelve o'clock at noon, in several distinct lots, certain FREEHOLD PROPERTY, situate in the parishes of St. Agnes and Perranzabuloe, and in the borough of Penryn, in the county of Cornwall; also, certain DUCHY, or COPYHOLD, LANDS, in the parish of St. Erme, in the said county; also, of certain UNDIVIDED SHARES of and in tin, copper, and other ores, to be raised out of certain tenements, in the parish of St. Agnes, consisting of the reversion in fee, expectant on the decease or second marriage of Elizabeth Ley, widow, now aged seventy-six years, of and in ONE FULL UNDIVIDED THIRD PART or SHARE of and in certain MANORS, plot, or piece of ground, dwelling-house, and tenement, or estate, viz.:—Of and in the Manor, or reputed Manor, of Ventongimps, in the said parish of Perranzabuloe, containing by estimation about 370 acres; of and in the manor, or reputed Manor, of Goonearl, in the said parish of St. Agnes, containing 960 acres; of and in a Plot or Piece of Ground situate within the said borough of Penryn, part whereof lies opposite to the Fish Cross, in Our Lady's-street, together with the Assembly Room, or Assembly House, and premises erected thereon; and of and in a Messuage, or Dwelling-House and Tenement, or Estate of Land, commonly called or known by the name of Trewargan Vean, part of the Manor of Moresk, in the said parish of St. Erme.

Printed particulars whereof may be had (gratis) at the said Master's office, in Southampton-buildings, Chancery-lane; of Messrs. Jones and Blaxland, solicitors, Crosby-square, Bishopsgate-street; of Messrs. Dean, Cressy, and Dixon, solicitors, Gray's Inn; of Mr. Musgrove, auctioneer, Austinfriars, London; and of Mr. J. N. R. Millett, solicitor, Penzance, Cornwall. J. E. DOWDESWELL.

BRYNDU COAL and IRON-WORKS, GLAMORGANSHIRE.—In consequence of C. M. Talbot, Esq. (the ground landlord of these works) having filed a bill, and given notice, on Wednesday last, to move, on Friday following, for an injunction to restrain the sale of the greater part of the machinery and effects on these works, advertised for sale on Monday, the 4th of July, it has been thought better by Mr. Ford (the proprietor) to POSTPONE THE SALE until the decision of the Court of Chancery is obtained. The public are, therefore, respectfully informed, that, in consequence of those proceedings of Mr. Talbot, the sale is postponed until further notice.

TO BE SOLD, OR LET, VALUABLE SLATE WORKS in NORTH WALES, within an easy distance of the sea, held for a term of which forty-six years and upwards are unexpired, subject to a royalty only, and no money rent. A considerable sum has been expended in clearings, openings, and levels into the mountain through which the slate vein runs, by which the existence of an inexhaustible quantity of roofing slate, and slab of the best quality, has been placed beyond doubt, and a very small capital will suffice to work it out.—Excellent machinery, manufactured in Manchester, has also been erected on the premises, and is worked by water power.—For full particulars, and to treat, apply to Messrs. Parkes and Son, solicitors, Verulam-buildings, Gray's Inn, London.

TWO LOCOMOTIVE-ENGINES FOR SALE—13-inch cylinders, 18-inch stroke, powerful engines, particularly adapted for luggage trains or collieries.—Further particulars may be obtained on application to Messrs. Chanter and Co., 18, Earl-street, London, and 24, Cooper-street, Manchester; or at the office of this Journal, 37, New Broad-street, London.

STEAM-ENGINE.—TO BE SOLD, a PUMPING-ENGINE, with boilers, pumps, steam and feed pipes, &c. &c.—For further particulars apply at the office of this Journal, 37, New Broad street, London.

PENHALS TIN AND COPPER MINE, St. Agnes, Cornwall.—Capital £10,000, in 1000 shares of £10 each. Deposit £1.—Cost-book system, with Deed of Settlement.—This mine was worked for the some eighty or ninety years ago, and produced large profits to the adventurers, who, for want of power and machinery adequate to drawing off the water, were necessarily obliged to confine their operations to comparatively shallow levels. The sett, for tin, copper, and all other minerals, has been secured on advantageous terms and moderate dues, being 1-24th until the adventurers make profits, afterwards 1-18th; it is likely, however, that they may be permanently fixed at 1-20th, and the term will be twenty-one years, from Midsummer, 1842. Within the limits of the sett is comprised the well-known PINK MINE, which some few years since was so famous for the abundance and quality of its tin. It is bounded on the north by the sea, on the south by Wheal Kitty, on the west by the Trevaunance and Royal Polberro Consols, and on the east by the Blue Hills Mines, all of which have, as it is well known, been highly productive of tin of first-rate quality. Negotiations have been opened to obtain the Blue Hills sett in conjunction with the present, should it be deemed expedient. The ground is killas, and can be wrought at an easy expense. In the former workings of Polberro (then known as the Seal Hole Mine) more than £100,000 profit accrued to the adventurers, and these mines have produced for the last seven years, and now continue to produce, full 200 tons of black tin annually. The principal veins or lodes producing this tin run into, and intersect, PENHALS, but the principal motive which has created a desire for mining in this locality, in the present depressed state of the tin trade, is the discovery of a large and valuable copper lode in the Trevaunance Consols, east of Polberro, and contiguous on the west with Penhals. This lode has been cut at about 120 fathoms from the surface, and under that hard stratum of ground, beneath which it was supposed no minerals existed. A course of copper ore, full six feet wide, is now found in it, of excellent, and daily improving, quality. It is ascertained by actual dialling that this lode bears its course east to Penhals, and enters the sett in the opposite side. The mine being close to Trevaunance Pier, materials can be imported, and the produce exported, on very advantageous terms.

The foregoing prospectus was submitted to a meeting of persons interested in mines, at Mrs. Opie's, St. Agnes, on the 13th of June, 1842, who, having every reason to believe the circumstances stated therein to be founded on fact, resolved to use their best endeavours to form a company to work the sett. They considered that the sum required for the erection of a steam engine, shafts, and other requisites, and placing the mine in a full course of working, would be £10,000—to raise which, they determined on dividing the adventure into 1000 shares of £10 each, to be conducted on the cost-book system, with a present deposit of £1 per share, the remainder to be called for as the exigencies of the mine may require. It is, however, confidently expected that this capital will be considerably diminished by returns of tin and copper.

A provisional committee, consisting of the following shareholders, viz.:—Mr. W. J. [illegible], Captain R. Rowe, Captain W. Hoskins, Mr. Beckerleg, and Mr. James Stephens was formed, for the purpose of issuing the prospectus, obtaining the necessary setts, and doing whatever may be needful to the proper formation of a company of adventurers, under a proper Deed of Settlement.

At this meeting many shares were subscribed for, and many respectable and influential individuals have since intimated their intention of taking an interest in the concern.

Applications for shares should be transmitted, pre-paid, to either member of the above-named provisional committee, addressed to him "St. Agnes, Truro."

RAILWAYS IN GENERAL.—R. B. WATSON AND CO., of LEEDS, beg to intimate to those interested in railway property, chiefly in the northern counties, that they are enabled to give information, and an opinion, as to those lines in which it would be advisable to invest money at this particular period, founded upon a knowledge of the trade of the district, acquired during a residence of twenty years in Hull, and twelve in Leeds—ten of which R. B. W. has been a commercial broker, and six a share broker; thus giving them an advantage that few possess in the share department.—N.B. Wanted to purchase, Twenty Leeds and Selby Railway Shares.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the proprietors of this association will be held at the office of the company, 26, Austinfriars, on Monday, the 11th of July next, at One o'clock precisely.
By order of the court of directors,
26, Austinfriars, June 29. W. LECKIE, Secretary.

DE DUNSTANVILLE MINING COMPANY.—The directors of the above company hereby give Notice, that a HALF-YEARLY GENERAL MEETING of the shareholders will be held at the office of the company on Friday, the 29th of July inst., at Two o'clock precisely.
26, Birchin-lane, London, July 8.

RIO DE ANORI GOLD-STREAM-WORKS COMPANY.—Notice is hereby given, that a SPECIAL MEETING of the shareholders in this company will be held at the George and Vulture Tavern, St. Michael's alley, Cornhill, on Monday, the 18th of July, at One o'clock precisely, to consider the important accounts received from Capt. Von Grieff relating to the prospects of this company, and for the purpose of fully discussing the wisdom of further prosecuting the enterprise, or abandoning the same altogether, and on other special business; and any shareholder may, in the mean time, inspect the above dispatches at Mr. Harper's office. By order, SAMUEL HARPER, Sec.
7, Cloak-lane, City, July 8.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that a PAYMENT of THIRTY PER CENT., or Thirty Shillings per share, in respect of the "new shares" (or "red scrip"), amounting to £44,780, raised under the resolutions of the general meeting of proprietors held on the 18th of October, 1841, will be made at the office of the association on and after Monday next, the 11th inst. By order of a court of directors,
34, Old Broad-street, London, July 7. JOHN MATHER, Sec.
*** The scrip issued by the association for the above shares must be left at the office two clear days before payment can be made.

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of proprietors of this association will be held at the London Tavern, Bishopsgate-street, on Wednesday, the 27th July instant, at One o'clock precisely, when the election of two directors and one auditor will take place. Directors going out by rotation—Sir John Easthope, Bart., M.P., and John Hibbert, Esq.; and who being eligible thereto, are candidates for re-election. Auditor going out by rotation—Charles Morris, Esq.; and who being eligible thereto, is a candidate for re-election.
By order of a court of directors,
34, Old Broad-street, London, July 7. JOHN MATHER, Sec.

COPPER MINE.—The proprietor of a property in Jamaica, within three miles of a port frequented by British shipping, has observed strong indications of COPPER ORE, which he has every reason to suppose might be worked to much profit and advantage, if fully explored and entered into. From the specimens sent to England for analysis and investigation, and from the reports of such men in the island as have examined the spot, its richness is apparent. Before pursuing the undertaking further, he would be happy to obtain the assistance of any party, or parties, who would (on advantageous terms, to be agreed on) join in further prosecuting the inquiry.—For particulars address "P. P.," in the first instance, to "W. H.," Jamaica Coffee-house, Cornhill.

SHARES WANTED.—An ample security for £500, yielding £30 per annum (payable punctually half-yearly) will be exchanged for the like amount in shares, at the market price, in a railway, mining, or other public company, producing at present inadequate dividends, but with such probability of improvement in value, as offers sufficient inducement for the speculation.—Address, prepaid, with particulars of shares, to "D. S.," at 75, Old Broad-street, London.

BRUNTON'S PATENT SEPARATOR, for DRESSING ORES.
TO THE PROPRIETORS AND MANAGERS OF COPPER, LEAD, TIN, AND OTHER MINES.
WILLIAM BRUNTON is now ready to treat with the owners or managers of mines for the USE of his PATENT APPARATUS for DRESSING ORES, by which the spar and other earthy matters are separated from the ore with a precision and rapidity not attainable by the ordinary means now in use. The simplicity of the construction of the machine, the expedition, economy, and efficacy of its operation, must recommend it to all persons interested in the profitable working of mines. In order to demonstrate the capabilities of the apparatus, the patentee has constructed a machine of suitable dimensions for use, which parties, desirous of adopting it, may see in operation, by previously communicating with the inventor.
Letters to be addressed to Wm. Brunton, civil engineer, Neath, Glamorganshire.

THE PATENT SAFETY FUSE.
FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its usefulness with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c., &c.:—
"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."
Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

NOTICE TO THE CONSUMERS OF [illegible] STEEL.

MESSRS. JOS. SYKES and SONS, the Sole Contractors for, and only Importers of these descriptions of STEEL IRON, being determined to adopt every practicable expedient to protect the fair trader in, and consumer of, these several marks, HEREBY GIVE THIS PUBLIC NOTICE, that, from the 31st March, 1842, no iron of the above marks has been, or will be, delivered by them, without the additional mark of [SYKES] being impressed thereon; such last-mentioned mark having been adopted by Messrs. Jos. Sykes and Sons for the further protection of themselves and the public; and all persons who shall impress the above marks, or any one of them, upon any bar-iron, either with or without the additional mark [SYKES] will be proceeded against.
Hull, June, 1842.

SMOKE NUISANCE.—CHANTER & Co., of 18, Earl-street, London, and 24, Cooper-street, Manchester, beg to INVITE the authorities and citizens of London, manufacturers, and others, to INSPECT the VARIOUS FURNACES erected by them in London, to obtain ocular demonstration that SMOKE can be effectually BURNT and coals saved, without injury to boilers or increase of labour to firemen.—Applicable to all steam boats, steam-engine boilers, sugar pans, dyers, &c. Pans and boilers of every description used for manufacturing purposes, and public establishments, hospitals, hotels, and club-houses, for boiling coppers, baths, &c., by which the economy of fuel will soon repay the outlay; the boil effected in one-third less time, with a more regular and lasting heat—dust and smoke prevented, and less attention necessary to the fires.
Cards to inspect them in operation, can be had by letters, or personal application, at 18, Earl-street, or 215, Upper Stamford-street; or to Mr. English, 37, New Broad-street, London.

Just published, Part I.,
COMBUSTION of COAL, CHEMICALLY & PRACTICALLY CONSIDERED. With coloured plates.
By CHARLES WYE WILLIAMS, Esq.
London: Simpkin, Marshall, & Co., and J. Weale; Birmingham: Wrightson & Webb.

A REAL BARGAIN.—JOURNAL DES MINES, publié par l'Agence des Mines de la République, avec Table complète, in [illegible] vols., 8vo., half bound, neat, £3 3s. (published at £[illegible])—ON SALE, by E. Wall, Foreign Bookseller, 150, Fleet-street.

Just published, price 5s.
AN EXPERIMENTAL INQUIRY INTO THE ADVANTAGES ATTENDING THE USE OF CYLINDRICAL WHEELS ON RAILWAYS, with an Explanation of the Theory of adapting Curves for Cone Wheels, and of its application in Practice, and an Account of Experiments, showing the Easy Draught and the Safety of Carriages with Cylindrical Wheels.
BY W. J. MACQUORN RANKINE, C.E.
Edinburgh: [illegible] and Son, [illegible], Prince's-street; London: Longman and Co.; Dublin: Curry and Co.

PROF. VIGNOLES'S LECTURES ON CIVIL ENGINEERING, WITH PRACTICAL ILLUSTRATIONS.

Lecture 11 (Second Course).—In resuming the subject of the Upper Works of Railways, the Professor said he would enter briefly into the consideration of the strongest form of rail, after explaining those points applicable alike to cast and to wrought-iron bars. First, a certain breadth was required for the bearing surface of the rail, for the wheel to run upon, and this breadth should be such as not to be likely to produce improper action or grooving in the tire or tread of the wheel, and, at the same time, not to be increased so as to make the rail needlessly heavy; there must also be a sufficient depth or thickness of that bearing surface, to make it strong enough to withstand abrasion, and render the rail sufficiently stiff, and capable fully of sustaining the action of the driving-wheels of the locomotive-engine. Hitherto the established breadth seemed to have been about two and a half inches on the top web, or button, and Mr. Vignoles thought, from experience, that that breadth should be considered the *minimum*; however, the strength of this bearing part of the rail, being as the breadth and square of the depth, a greater breadth than absolutely necessary to prevent the tire of the wheels being grooved, would add to the weight of the rail, without increasing the strength more than in the direct ratio of the breadth, while the same quantity of material, disposed in terms of the depth, increases the strength in the duplicate ratio. Considering the great increase of weight in the locomotive-engine of late years, and the continued wear and tear on the rail, from the action of the driving-wheels, and looking to the state of the iron of the upper works of those railways which have not very heavy bearing surfaces, it would seem that, while two and a half inches is a *minimum* of breadth, the chief attention is now required to the proper depth, to resist abrasion and exfoliation, which takes place, especially if the iron is not perfectly well rolled. Railway bars are compounded of faggotted iron, and if the pieces are not properly welded, the bearing edge is broken down, and peels off; but, supposing the iron good, and the manufacture perfect, the heavy effects of the engine must be provided against, and experience shows that an inch and a half is not too much for the depth of the top web, or bearing part of the rail, and two and a half inches being the breadth, then three and three-quarters—or, say, four square inches—should constitute the sectional area of the part that is exposed in receiving the direct action of the driving-wheels; this is the section actually requisite, and the greatest additional strength being to be obtained by increasing the depth, if possible, this is the point to be attended to. It thus appears that a weight of 36 lbs. per yard is required to sustain the engine, and all beyond will belong to the mode of attaching the rail to the support below. In treating of the wear and tear of rails, Mr. Nicholas Wood has given some curious and interesting results of experience; but the weight of the locomotive-engines used is stated to have been only ten tons, and of this the weight on the driving-wheels would probably not exceed six or seven tons. The result of a variety of experiments on the malleable iron rails of the Stockton and Darlington Railway gave one-tenth of a pound per yard as the absolute amount of fair abrasion; some statements, however, made it much higher, being one-sixth of a pound. On the Killingworth Colliery it was one-eighth of a pound. On the Liverpool and Manchester Railway, some years ago, three rails were taken up, carefully cleaned and weighed, relaid and taken up again at the end of one, and again at the end of two years; the wear was found constant, and about one-tenth of a pound per yard per annum. If we were to take this to be the true wear, and suppose it to arise wholly on the upper surface of the rail, the result would be but the 84th part of an inch in depth, and it might be supposed to take 100 years to wear away a rail from mere abrasion. But later experience shows that the increased weight of engines acts very destructively on rails whose upper webs are not sufficiently strong, and of the best manufacture. We may take ten tons as the present average weight on the driving-wheels of a locomotive-engine; and, if this is to be effectually provided for, the button, or bearing part of the rail, must not be less than forty pounds to the yard. Now, the form of the remaining part of the rail will depend upon the manner in which it is to be fastened down to the support below, either by being fixed in a chair, which is itself to be again fastened to something else, or by being screwed down, as the rails on the Great Western, Croydon, and the new part of the Greenwich Railway; or, finally, secured in the simple manner described in the last lecture. A comparatively very small addition to the theoretical form of rail to be sustained in a chair, gives a section which has the advantage of being capable of being turned in either direction, or vertical position, and hence the top and bottom of the rails have, of late, as previously stated, been made equal and similar, connected by a neck of proportionate dimensions. With the present, heavy rails, of nearly 80 lbs. to the yard, the average weight of the chairs, including the joint chairs, may be taken at 20 lbs. per yard, reducing the intervals of support to that constant distance. Thus, we have an aggregate of nearly 100 lbs. weight of iron per yard of each single rail. If, then, we could in any way get rid of the extra weight required to fasten the rail into the chair, and dispense with the chair altogether, it seemed to Mr. Vignoles to be desirable to do so, provided the object in view was equally well attained; and he contended that such would be the case with a 50 lb. rail attached, in the mode before described, to a longitudinal bearing of timber; for the whole strength of the upper, or bearing part, would be retained, that being as the breadth and the square of the depth; thus, with a weight of iron just one-half, would be equally efficacious, and it only remained to compare the supports in either case. Now, as stone blocks seemed to be discarded by universal consent, the question of the supports below is narrowed to that of *transverse* or of *longitudinal* wood sleepers. Sufficient experience had been obtained to warrant the conclusion that, for the purposes of this argument, the cost of fastening and of laying the rails, ballasting, drains, &c., taken as a whole, were nearly the same for both systems, and it only remained to contrast the quantities of timber, and, always considering a locomotive line to be the one to be made, it may be stated that this cubing was about double for the longitudinal system to that in the transverse method of laying the sleepers. In short, looking at first cost only, there was a saving of 100 lbs. of iron, and an increase of two cubic feet of timber in each yard of single trackway of the former over the latter mode, so that strictly the longitudinal system was the cheapest; but, to avoid minor objections, let the cost of each be taken to be the same, which was giving a decided concession in favour of the transverse system. But this was a very narrow view to take of the question, which wholly omitted the economical results from diminished wear and tear of the engines, of the railway, and of the carriages, as had been most especially exemplified on the Dublin and Kingstown Railway, where the many granite blocks, originally laid down, had been all replaced by longitudinal timbers, and though the old light 45 lb. rails and 15 lb. chairs were retained, the diminution of the annual maintenance was most remarkable, though there was not a railway in the United Kingdom where as many passengers were carried daily throughout the year. The expense of keeping up the double way, now that the system of longitudinal timbers has been quite carried out, is less than one-third of the corresponding expense per mile per annum of maintaining the London and Birmingham Railway. Mr. Vignoles then read a variety of tabular results of the cost of the three various systems, going through all the details, and pointing out the exact measures and quantities, and stating the actual expenditure on the upper works of various lines of railway. The result seemed, that, for a double line of railway—upper-works, properly laid after the bed of the road was fairly prepared, including all the items under that head, which were enumerated in a former

lecture, and calculating, for the present heavy and powerful locomotive-engine, that no less a sum than 5000*l.*, and, in most cases, 6000*l.*, per mile was necessary, and that, in many instances, it had reached nearly 7000*l.*—the market price of iron and timber, also the quality of the latter, the greater or less facility of obtaining materials for ballast, &c., affecting the amount, and these large sums were independent of the earthwork, masonry, land, fencing, management, stations, carrying establishment, &c. Mr. Vignoles also gave a number of drawings and diagrams contrasting the three systems, and exhibiting, in a very explanatory manner, the modes of laying and fastening. He also exhibited the rail, chair, and fastenings, for the transverse method, with all the recent improvements introduced by Mr. Cubitt on the South-Eastern Railway, and as manufactured by Messrs. May, of Ipswich, and then produced the rail with the dove-tailed slot, and the mode of attachment to longitudinal half baulks of timber, repeatedly alluded to in this and the preceding lecture, observing forcibly, that, if the same effective results were obtainable by the latter simple method, as by the former complicated one, it was not only to be preferred in this kingdom, but was peculiarly eligible for such countries as Russia, Poland, Germany in general, France, and America, where wood is usually in great abundance, and where iron is comparatively scarce, especially in the form required for railway bars, and, of course, the prices became in proportion. Mr. Vignoles quoted largely from the works and reports of Tredgold, Barlow, and Lecount, and stated a number of mathematical and empirical rules, laid down by those authors, which, he stated, were chiefly relating to rails supported at intervals, but, though he felt it right to lay them before the class, he considered that further experiments and investigations were requisite, and particularly in reference to the perfect combination in one support of the iron and timber in the longitudinal system, as explained and advocated by him, of which, the Professor insisted, the great advantage and peculiarity was that of obtaining a perfect fastening, independent of the fibre of the wood, or the tenacity of the screws or bolts thereto, and of obviating the hitherto well-founded objections to the mode of attaching rails having a continuous bearing, which had not been able to prevent a vertical play of the iron on the timber.—[We have only been able to give a very brief outline of this and of the preceding lecture, which involved considerations of the highest importance to the railway system.]

AMERICAN PATENTS.

[From the *Journal of the Franklin Institute.*]

John Wilder, city of New York, for a method of operating the working valves of steam-engines, *January* 9.—An arrangement of levers for working the valves of steam-engines, is to be made within the steam chest, and these are to be operated by the rod. The valve has a conical seat, and may work on a stem to insure its working truly. The main lever is jointed at one end to the lifting rod, and at the other to the centre of the valve; and at its middle to a second lever which embraces it, and which has its fulcrum in a line with the joint, which unites the first lever and lifting rod, when the valve is closed. The claim is to the "combination of the lifting rod, principal lever, and the second lever, with the eduction valve."

Charles Sanderson, Sheffield, England, for improvements in smelting iron ores, *February* 9.—"The object of my invention for certain improvements in the art or process of smelting iron ores, is to separate the scoria, slag, or other earthy or extraneous matters, from the metallic parts of such ores, in a better and more economical manner than is commonly practised in the smelting of iron ores; and the invention embraces a novel or improved manner, or method, of treating or operating upon such ores, whereby I am enabled to separate and remove the scoria, or earthy matters, contained therein, from the metallic parts, without the necessity of carbonising the metallic parts so thoroughly as to cause them to melt together into a fluid state, as they do in the common blast-furnace; but my method consists in carbonising the metallic parts to that extent which will enable them to separate from the scoria during the process of melting, whereby I am enabled to separate the metallic parts from the scoria without the necessity of melting both at the same time into a fluid state, and running off the fluid iron from the scoria, or slag, as is the usual practice in the blast-furnace; that is to say, I so treat and operate upon the ore, that I reduce the scoria, or other extraneous matters contained therein to a fluid state, so that the same will separate from the metallic parts and run off, leaving the metal without its changing into a fluid form, but in a sort of pasty consistency, and in a fit state to be removed from the furnace, and applicable to various purposes, particularly to the making of bar-iron." The claims refer throughout to numerous drawings, and are therefore omitted.

Henry Waterman, city of Hudson, Columbia county, New York, for improvements in locomotive engines for railways, February 9.—The character of this invention is given with sufficient clearness in the claims made, which are as follows:—"What I claim as my invention, and desire to secure by letters patent, is the particular mode of connecting the rear and front driving wheels by means of jointed rods placed at each end of said axle, so constructed as to enable the wheels to have a lateral and vertical motion to enable them to accommodate themselves to the curvature of the track, and pass over whatever obstacles may intervene without danger to the engine. And in connecting the main boxes of the main driving axle to the base of the cylinder, or other convenient place, by jointed rods, so as to hold them firmly, and thus resist the strain on the axle and joints of the ordinary frame produced by the oscillating action of the pistons and their connections; and thereby to dispense with the usual frame and pedestals, which, with the boxes, are constantly liable to wear, from the causes before stated; and I claim the above-mentioned improvements, whether they are effected in the manner herein set forth, or in any other mode substantially the same, and the last-named improvement to be applied also to engines having but one pair of driving wheels."

William W. Hunter and Benjamin Harris, Norfolk, Virginia, for improvements in the mode of constructing and propelling steam vessels, antedated November 2, 1840.—The patentees say—"The nature of our invention consists in providing the vessel with an arch deck, called a shield deck, faced with iron, which facing forms, with the direction of any missive discharged from cannon afloat, an angle over 135°, and will therefore glance, or throw off, said missive. Said shield deck, in combination with the parts of the vessel below it, gives (by its displacement of water) a buoyancy, by which said vessel will float, though the vulnerable parts of said vessel be pierced, or torn by shot, so as to admit all the water capable of entering. The steam engines, machinery, and water-wheels are placed below said shield deck, and every part of them below the water line, therefore out of the reach of shot, and the water wheels being, from their position, always submerged, are relieved from the effect of the sea." The wheels work horizontally, or inclined, in cases, or trunks, built in the vessel and open at the side. The wheels consist of a drum, with the paddles attached permanently to the periphery thereof. A portion of each wheel projects out of the case, or trunk, beyond the side of the vessel, and the shaft passes through the casing, and the water is prevented from leaking into the vessel by means of a stuffing box.

Claim.—"What we claim as our invention, and desire to secure by letters patent, is the application of shield decks to vessels constructed of metal, or wood, whether propelled by steam power or any other, and also the application of submerged water wheels, on the plan described in the accompanying specification, whether placed horizontally, or obliquely, for the purpose of propelling vessels."

Jesse Tuttle, Boston, Massachusetts, for an improvement in the rotary steam-engine, March 26.—In this engine, as in many of the old rotary engines, the chamber in which the piston works is formed by two plates, each having a semi-circular annular groove, which, when put together, form the chamber for the rotary piston to work in. The piston is attached to the outer edge of a plate, which rotates on the axis between the two heads that form the piston chambers, commonly called the cylinder. On each side of this rotating plate is formed a cam groove, which receives a pin projecting from each side of a forked connecting-rod, for the purpose of working the abutment valves. There are two of these abutment valves, placed on opposite sides of the piston chamber, with their forked connecting-rods, the pins of which slide in slots made in the outer case of the engine. The steam chambers are situated on each side of the rotating plate, in which suitable apertures are made, as well as in the shaft, to conduct the steam from the side pipes to the piston. There is a sliding valve, with a handle, for changing the direction of the motion of the piston.

Claim.—"What I claim, and desire to have secured by letters patent, is the improvement of rotary engines by a combination not heretofore known; the said combination consists of the method of operating the abutment valves by means of the branched, or forked, connecting rods, having at each of their extremities a pin projecting at right angles into the outer shell, or case, said pins working in a slot in the side of the case and operated upon by the cam upon the side of the rotating plate, as herein set forth. And the constructing of the steam chambers on each side of the rotating plate, as described, connected with apertures in said rotating plate and shaft for conducting the steam to and from the piston, in combination with the side pipes and slide valves, the whole being combined, constructed, and arranged as set forth."

Francis B. Tucker, Paterson, Passaic county, New Jersey, for an improved apparatus for regulating the pressure of steam and other fluids, confined in pipes and other receptacles, March 26.—In the constructing of this apparatus one end of a balance lever is connected, by a joint link, with a sliding valve, which governs the inlet of steam, or other fluid, and the other end of said balance is connected with a piston which works in a cylinder opening into the pipe, or other receptacle, into which the steam, or other fluid, has been admitted. A sliding counter weight is attached to one end of the balance lever, so that by moving it farther from, or nearer to, the fulcrum, the pressure of the steam, or other fluid, will be regulated. It will be evident, that if the pressure within the pipe be too great, the piston will be forced up in its cylinder, which by means of the connection with the balance lever, will partially close the sliding valve, and vice versa.

Claim.—"I do not claim as my invention, any parts of the machine as new in mechanics, nor as involving a new or peculiar motion, but I do claim as my invention, and not previously known or used, the general arrangement of the machine herein described and set forth for the purpose of regulating the pressure of steam and other fluids confined in pipes and other receptacles, by means of a piston, moved by the pressure of the fluid itself, and communicating [illegible] motion to a slide valve, so as to reduce the aperture through which the fluid, but under greater pressure, is admitted."

J. [illegible] Carlon, and Edward Locke, of Newport, England, for improvements in the rotary steam-engine, March 26.—The distinguishing character of this invention is—"That a revolving wheel is enclosed within an exhausted box, or case, and impelled and turned rapidly round by a continued current of steam entering with force and velocity into the exhausted space wherein the wheel is situated, and impinging against suitable vanes, at the circumference of such wheel, in the direction of a tangent to that circumference. The said box being connected by an eduction pipe, with a condenser, which is kept cool by means of cold water, so as to exhaust the steam from the box, at that part of the circumference of the said box where the steam [illegible] to act against the vanes; and that condenser having an air pump [illegible] of continued action, in order to keep up the exhaustion within the enclosed condenser."

LAW INTELLIGENCE.

IMPORTANT DECISION AS AFFECTS THE CARRIAGE OF PARCELS BY RAILWAY.

COURT OF EXCHEQUER—JULY 7.

Pickford *v.* the Grand Junction Railway Company.—Mr. Baron Parke gave judgment in this case as *follows*:—The two main questions raised in this case are, first, whether the defendants were bound to carry a hamper containing several parcels, each less than 112 lbs., directed to and intended for different persons, for the sum offered to them by the plaintiffs; and secondly, whether they were bound to carry a parcel from Manchester to Camden Town for the sum offered to them by the plaintiffs. There were two hampers, each containing several small parcels, tendered at different times to the defendants, but the same question arises out of both. The sum tendered in respect of each is found to be the full amount the defendants were entitled to receive for the receipt and carriage of the hamper and its contents, and for all other charges, unless the defendants were entitled to charge for each parcel contained in the hamper separately, or to charge 1d. per pound on the gross weight of the hamper and its contents. We are to determine, therefore, whether the defendants are entitled to make either charge a mixed question of law and fact—the fact being submitted to us, by the consent of the parties, as to a jury. Under the Act of Parliament establishing the Grand Junction Railway Company, 3d Geo. IV., c. 34, the company is authorised, by sec. 156, to carry on that railway all such goods, &c., as shall be offered to them, and to make such reasonable charges as they may, from time to time, determine upon, in addition to the tonnage and toll, without any other restriction, in the case o goods, than that the charge should be reasonable. By the 4th William IV., cap. 55, sec. 19, these powers are extended to the carriage of all goods that should be offered on others railways, but they are still to make reasonable charges for such carriage. By virtue of this clause, the company, in their character of common carriers, are bound to carry for reasonable charges, if reasonable charges are tendered. The true question, therefore, is resolved into this, whether, for the hamper containing small parcels, it is reasonable to charge either for each parcel contained in the hamper separately, small parcels consigned to different persons, or 1d. per pound on the gross weight of each hamper and its contents. The charge is no doubt to be varied according to the trouble, expense, and responsibility attending the receipt, carriage, and delivery of the different articles, and for small parcels more ought to be paid than a proportionate part, according to the weight and price of larger parcels of the same commodity, by reason of the great trouble in receiving, dispatching, and delivering, as they are exposed to a much greater risk of abstraction or loss. But, if all the small parcels are united in one package, and delivered for carriage in that package, consigned to one person, the trouble and responsibility are apparently reduced, precisely to the same degree as if all the articles contained in the package were the property of the same owner, and intended to be delivered to him. There would seem, therefore, to be no right to charge for such package of distinct parcels belonging to different owners, more than if they belonged to the same; but then, it is urged on the part of the defendants, that there really is an increased responsibility, arising from the simple fact that each parcel is the property of a distinct owner, because it is said that, in the event of a mis-delivery, the company would be liable to several actions of trover instead of one; and, even in case of loss or damage by neglect, each separate owner might maintain an action, on the custom of England, with respect to his own goods. It is very doubtful, at least, whether, on the custom of England, separate actions could be maintained, as the relation of employer and carrier would not have subsisted between them and the company, but between them and the plaintiffs. As the action of trover, however, could be maintained, it would not be unreasonable to allow some additional remuneration, on account, not of the liability to pay greater damages, for they would be the same in both cases, but to pay the same damage by means of different suits. We are relieved, however, from the necessity of deciding what the precise amount of additional compensation should be (which, at all events, should be trifling), because it is admitted in the special case the sum tendered is proper, unless the defendants had a right to charge for separate parcels, which they certainly had not; because neither the trouble, expense, nor responsibility, is the same as if the parcels had been separate, or unless the defendants had a right to charge 1d. per pound. We have no difficulty in saying, that the last-mentioned remuneration is excessive, and unjustified by the increase of responsibility, from the circumstance of the properties being separate. It is impossible to support, on this ground, the charge of 4*l.* 1*s.* 8*d.* for the first package, of which, if it had consisted of parcels, one property, 1*l.* 6*s.* 6*d.* would have been proper, and a charge of 3*l.* 1*s.* 6*d.*, instead of 9*s.*, for the second. We are of opinion that the plaintiffs are entitled to our judgment on the first question raised between them, which is the subject of the two first counts. On the second question the Court have already intimated their opinion that this company cannot support a claim for the same sum for carriage to Camden Town, and for a carriage thither and delivery at any place in London. By the provision already referred to they are to carry for reasonable charges for carriage; and by the 3d Victoria, cap. 40, sec. 26, such charges are to be made equally; and it is clearly unreasonable and unequal to charge the same sum to a consignee who is willing to receive the goods at Camden Town, and one who requests them to be delivered at the London Docks or elsewhere in London. The plaintiffs are bound to pay the balance of 65*s.* per ton after deducting a reasonable charge for delivering in London and no more, and the defendants must carry to, and deliver at, Camden Town for that sum. The plaintiffs are therefore entitled to succeed on the second issue raised by the special case, and the verdict on all the issues is to be entered for the plaintiffs.

RATING OF RAILWAYS.

[The following important case was heard at the Somerset Quarter Sessions, at Bridgwater, last week.]

Henry Abbot *v.* the Parish Officers of Long Ashton.—This was an appeal against a poor's rate for the parish of Long Ashton, on the ground that the Great Western Railway Company (who are occupiers of the Bristol and Exeter Railway, which runs through that parish) were underrated therein. The amount at which the company were rated was 85*l.*, and the assessment thereon, at 4½d. in the 1*l.*, was 1*l.* 10*s.* 9*d.*

Mr. Kinglake opened the appellant's case, and stated that the Great Western Railway Company were lessees of the Bristol and Exeter Railway, extending from Bristol to Bridgwater, a distance of about thirty-four miles, at the fixed rent of 30,000*l.* a-year, and an agreed tollage on passengers and goods, amounting to about 7000*l.* a-year more; that the lessees covenanted to find all the plant necessary for working the line, and to keep the same in tenantable repair (fair wear and tear excepted) at their own cost, and that the railway extended two miles and seventy-one chains within the parish of Long Ashton. He submitted that, upon the authority of the "Queen *v.* the South-Western Railway Company," recently decided in the Court of Queen's Bench, the proportion of such rent and tolls for two miles seventy-one chains, after the rate of 37,000*l.* for thirty-four miles, was the lowest amount at which the railway should be assessed to the poors' rate in the respondent parish. The learned counsel concluded, by saying he should endeavour to prove the amount of such rent and tollage; and if he failed in this, he should give evidence of the amount at which the railway was assessed in the parishes at the two extremities of the line, with other evidence of the rateable value of such property.

Mr. J. B. Badham (secretary of the Bristol and Exeter Railway Company) proved the existence of a lease of that railway to the Great Western Railway Company, and on their counsel declining to produce the same, the lease in Mr. Badham's possession was put in, by which the facts stated by the appellant's counsel, in his opening speech, were proved. Mr. Badham stated that the amount paid for tolls on passengers and goods for the half-year ending the 13th December, 1841, was 3377*l.* 12*s.* 6*d.*; and that he had received no account of the tollage for the half year ending the 13th June last.

Mr. Barnes (an engineer on the railway) proved that the length of that part within the parish of Long Ashton was 2 miles 71 chains 90 links.

Mr. Fitzherbert (for the parish officers) stated, he appeared to consent that the court should amend the rate, by increasing the amount assessed on the railway company to such sum as they may think proper.

Mr. Bere (for the railway company) stated, that he could not contend there against the decision of the Court of Queen's Bench, in the case above-mentioned, but that such decision ought to be reconsidered, as it, in effect, affirmed a right to rate railway companies for the profits on their trade as carriers. He contended, at some length, against the principle, and also for the reduction of the amount at which this railway should be assessed in Long Ashton, on the grounds that the court could not apportion the rent, and that no evidence had been offered of the actual earnings of the line in the respondent parish, and also on the ground of the great cost of working the line and keeping the same in repair.

The Court, after reading the lease, found that the proportion of the rates and tolls assessable to the poor's rate in the parish of Long Ashton was 3000*l.*, deducting from which 10 per cent. for tenants' rates and taxes, tithe commutation, and other necessary expenses, there remained the net assessable value of 2776*l.*, by the substitution of which sum for that of 85*l.*, they ordered the rate to be amended accordingly.—Mr. Bere applied for a case, which was granted.

KENTISH RAILROADS—PRELIMINARY EXPENSES.

ROLLS' COURT—JULY 3.

Vallance *v.* M'Dougall.—Mr. Spence (for the plaintiff) commenced stating this case, in which the parties were solicitors, and the object of the suit was a share of the costs of the various Parliamentary proceedings for obtaining the Kent Railroad Acts, the prayer being for an account of all monies received by the defendant and Mr. Upton from the Kent Railway Company, and for a declaration that the plaintiff was entitled to a third part thereof, and that the defendant might be decreed to pay it, with the costs of the suit. The learned counsel entered into an intricate statement respecting the London and Gravesend, the London and Dover, and the Kent Railway Companies, and was proceeding with his case, when Mr. Pemberton (for the defendant) said, if his lordship would take another cause, he had hopes that the parties would come to an arrangement.

Lord Langdale assented, and another cause was called on.

At the rising of the court, Mr. Spence said, the parties had agreed upon the minutes of the decree, which he handed up, and requested his lordship to allow the registrar to enter them.—Decree accordingly.

RESPONSIBILITY OF DIRECTORS.

COURT OF COMMON PLEAS—JULY 1.

Waltters *v.* Gibson and others.—This was an action brought by the plaintiff, an attorney, living at No. 6, Hatton-garden, to recover from the defendants, as directors of a company called the Licensed Victuallers' Foreign Wine and Spirit Company, a sum of 176*l.* 2*s.* 2*d.* for his bill of costs incurred on the retainer of the company by the plaintiff as their attorney. The defendants pleaded *non assumpsit.*—The company in question, it appeared, was, in the month of July, 1839, proposed to be established for the purpose of supplying licensed victuallers of the metropolis with foreign wines and spirits at a reduced rate, and upon other advantageous terms. The defendant, Mr. Gibson, was in some degree interested in the undertaking, and through his instrumentality the plaintiff received the appointment of solicitor to the proposed company. Various meetings were held at the plaintiff's offices, when resolutions were adopted in conformity with the wishes of the proposers of the concern, and at length, on the 11th of October, 1839, the company assumed the name by which it subsequently passed, and took up its locality at No. 15, Bridge-street, Blackfriars. The plaintiff busied himself in endeavouring to procure subscribers, and at length twelve gentlemen were found, who were connected with the business of licensed victuallers, who consented to render themselves eligible to become directors by taking ten shares each, the resolution being that the capital should consist of 3000 shares of 50*l.* each, and that 5*s.* per share should be paid by a subscriber on his putting his name down as a shareholder. Among the gentlemen who joined the concern at an early period of its life were the three defendants, Messrs. Gibson, Gurney, and Lloyd, but the last-named individual had died since the commencement of the suit. A Deed of Settlement was prepared at the recommendation of the plaintiff, which was sent to Mr. B. Kerr, the conveyancer, to be settled, and the charges in respect of this deed were 35*l.* for the conveyancer, and 21*l.* for the plaintiff. The remainder of the plaintiff's bill consisted of charges for various attendances, for the use of his offices, and for work done in his capacity of attorney to the company. It appeared that the concern had proved a failure, and the present action was brought in December, 1839. The cause had been already tried once, when a verdict was found for the defendants, but this verdict was set aside and a new trial ordered, on the ground that the jury had misapprehended the evidence. It was proved also that Mr. Kerr's fees were not paid until the month of February, 1840, after the action had been commenced.

Mr. Serjeant Bompas, for the defence, called witnesses for the purpose of showing that the plaintiff had undertaken the management of the business of the company upon the chance of remuneration by raising subscribers, and of the payment by each of them of 5*s.* upon every share. The witnesses, however, on cross-examination, admitted that they had been called at the previous trial, and had said nothing in their evidence upon that occasion to raise such a presumption as that which was now sought to be established.—Sir. T. Wilde replied in a powerful speech.

Mr. Justice Erskine, in summing up, told the jury that to entitle the plaintiff to a general verdict in his favour, they must be satisfied that all three of the defendants were directors at the time all the work was done. It had appeared, however, that one of the defendants had not signed the document by which he became a director until the 20th of August, 1839, and a deduction of 20*l.* charged for business previously done, must, therefore, be made on this account. With regard to the fees paid to Mr. Kerr, it appeared that although they had been incurred previously to the commencement of the action, they were not actually paid until after the suit had begun. He thought, therefore, that this was an item which could not be recovered in the form of action which had been adopted, which was a common action of *assumpsit*, with the usual counts for work and labour done and for money paid. The remainder of the items were entirely for their consideration.—The jury found for the plaintiff—damages, 87*l.* 10*s.*

THE SOLAR LAMP—REPEAL OF PATENT.

COURT OF QUEEN'S BENCH—JULY 6.

The Queen *v.* Bynner.—This was a proceeding by *scire facias*, the object of which was to repeal a patent obtained by the defendant, for the application of a principle of which he claimed to be the inventor, and which he alleged could be applied to any lamp or gas burner. This principle was the introduction of atmospheric air at a point below the point of combustion, and the deflection of the air by means of metal or other deflectors upon the flame, at a point above the point of combustion. The patent obtained by the defendant (and which was now sought to be rescinded) was issued in December, 1837, and the chief grounds on which its validity was impugned was, that the invention was not new, for that the application of atmospheric air in the way described in the patent had been long ago known and practised, and great numbers of lamps had been made upon the same principle. To make out this defence, it was alleged that, so long ago as 1812, this principle had been applied by a person named Simpson, to the Argand lamp; that it had been afterwards applied to safety lamps, the holes for the admission of air having been made below the point of combustion, and the air having then to pass through the wire gauze invented by Sir Humphrey Davy (as the means of preventing ignition from fire-damp), and thus reaching the chamber where it was received and deflected upon the flame. This application of the principle was alleged to have been made by Mr. Upton in 1828. The patent was also impugned for want of clearness in the specification. The defence was, that the patentee claimed nothing but a new application of a principle; that the principle itself had been vaguely known and tried to be acted on some years ago; but that it was the defendant alone who had brought it into scientific and useful application, and, in substance, that the difference between him and those who had formerly directed their efforts to the same point was the difference between success and the want of it. A great many scientific witnesses were examined to make out this defence, and the case occupied the court from its sitting on Monday till late on Tuesday afternoon.

Mr. Justice Coleridge summed up the case to the jury, who returned a verdict for the Crown on all the issues but one (the seventh issue), taken on the record.

LONDON CAOUTCHOUC COMPANY.

COURT OF COMMON PLEAS—JULY 6.

Nickels *v.* the Company.—This was an action for the infringement of a patent obtained by the plaintiff for some improvements in machinery for covering fibres, applicable to braid and other fabrics. The invention has been applied to the manufacture of an article known as "Nickell's Patent Web," which is extensively used for glove springs, braces, garters, and other articles of domestic convenience.—The hearing of the cause was unexpectedly brought to a termination on the second day, by the parties entering into an arrangement that a verdict for the plaintiff should be taken.

Wonderful Discovery of Fossils.—At the village of Crowdicote, near Buxton, in Derbyshire, Mr. D. Harrison, in opening a quarry or pit to try the quality of the stone which it contained, on cutting the rock down it was found to be a beautifully variegated shell crystal and strata marble, embodied with the prettiest crystallised shells that Nature or art could form, as well as other mineral bodies. This curiosity of Nature contains the following remarkable fossil bodies incrusted all in one solid mass of stone, and capable of being got up by art to a beautiful polish. Of ornamental marble, a variety of white and brown cockle shells, muscles, also plain and fluted shells, the ammonite and nautilus shells, and periwinkle, snail horn, &c. The appearance of various kinds of fish, which none but able geologists could interpret; also the entroco. The figure of this last remarkable stone, when got up to a polish, is beautifully intersected with variegated colours of black, brown, white, and grey, and is a real curiosity.—*Sheffield Iris.*

The Artesian Well at Grenelle.—After four months of unremitted labour, pursued with the greatest science and judgment, M. Mulot has succeeded in extracting from the Artesian well at Grenelle the first tube, which had been got down to the depth of nearly 336 yards, and had become collapsed by the pressure of the water. The passage has not suffered any injury; and the water, which remains at the temperature of 23 deg. above zero, of the centigrade scale, and 73 deg. of Fahrenheit, flows with the same abundance, sometimes clear, sometimes muddy, according as the argillaceous strata in the upper parts of the passage fall down to the bottom. A new tube has been made, with great care, of cast-iron, about a quarter of an inch thick, covered with zinc both inside and outside, and so strong, that a heavily-laden waggon could pass over it without making an impression. This tube is to be sunk down to four or five yards in the sand at the bottom, whereby there is every reason to believe the water will rise perfectly clear, as the sand will cause a natural filtration, and purify the water from any mud it may contain; and the small stones or gravel the spring may throw up, will fall back again by their own gravity, as is the case in all wells. At the same time, the tube will prevent any of the earth of the upper strata from falling into and mixing with the water. Should no new accident occur, M. Mulot expects that the well will be completed early in the next year.—*Galignani's Messenger.*

TRANSACTIONS OF THE BRITISH ASSOCIATION.

STRUCTURE AND MODE OF FORMATION OF GLACIERS.

BY JAMES STARK, M.D.

The author stated that he employed the word "glacier" to signify the entire icy masses which filled the upper as well as lower valleys of snow-covered mountains, and extended downwards to the cultivated valleys or sea-shore. He was induced to overlook the artificial division of these masses into fers, *Mer de Glace*, &c., believing such divisions did not exist in Nature, and were inapplicable to the glaciers of the Polar regions. From an examination of the accounts given by Saussure, Auldjo, Desor, and others, Dr. Stark was of opinion that there existed no constant differences in the crystalline structure of the ice in different parts of glaciers; perfect glacier ice, both as to purity and compactness, occurred at all heights; from which he inferred, that after the crystalline particles of snow became once consolidated into compact ice, no farther change, or enlargement of those particles, occurred till the mass was finally dissolved. The ice of glaciers had always been described as arranged in regular layers, but their position and mode of formation, as explained even by the latest writers, was stated by Dr. Stark to be so obscure, that having carefully examined the facts, he had formed conclusions, of which, as they differed from those usually entertained, he proceeded to give a summary, classifying the differences observable in the structure of glacial masses under the following divisions:—1. *Horizontal Strata.*—The author remarked that this was usually termed banded structure, and seemed to be confined to the upper regions of the mountains. The planes invariably coincided with the surface of the glacier, the layers being usually one to three feet in thickness. They were mentioned by almost all writers on glaciers, and represented in the plates of M. Agassiz's work. Most writers considered them as marking the annual additions to the glacier; but as the amount of snow falling on the average during the six winter months would produce a much greater thickness of ice than the horizontal layers indicated, Dr. Stark considered that each band denoted a separate fall of snow, unless it should appear that snow and ice wasted with nearly as much rapidity in the upper as in the lower regions.—2. *Longitudinal and Vertical Strata.*—Dr. Stark stated that this structure had been described by Grüner in 1760, by Desmarest in 1779, Scoresby in 1824, and other authors, and during the last winter had been claimed as a new discovery by Professor Forbes, who styled it ribboned or banded structure. These layers he described as always of great tenuity, forming planes more or less vertical, but always parallel with the length of the glacier or its retaining walls. The explanation of this structure offered by Dr. Stark is as follows:—During the spring and summer months it is probable that glaciers advance from one and a half to three feet daily, and as the valleys occupied by them generally widen as they recede from the higher regions, every movement would leave a space between them and their containing walls; these fissures would continually fill up with fresh snow and ice, increasing the breadth of the glaciers, and forming a new series of vertical planes. The frequent occurrence of mud, gravel, and fragments of rock in the same planes, was considered by Dr. Stark to be much in favour of this explanation of their origin. This structure, he remarked, was likely to be found wherever pillars and needles of ice were met with, since fissures and crevices generally divided glaciers transversely; and in passing over rough ground, the unequal pressure on a combination of transverse fissures and longitudinal lamellæ would break up the ice into vertical prismatic colours.—3. *Horizontal Combined with Longitudinal and Vertical Strata.*—Although no such combination as this had hitherto been described, Dr. Stark thought it must exist. Horizontally stratified ice was confined to elevated regions, where the thickness of glaciers was three or four times greater than in lower valleys. Dr. Stark inferred that these beds gradually wasted away as the glacier descended, until only the lower, or vertically stratified, portion remained.—4. *Inclined Strata.*—This structure Dr. Stark endeavoured to explain as one superinduced, after the accidental destruction of the lines of stratification which formerly existed. In conclusion, Dr. Stark observed, that all the above forms of stratification might be expected to occur in the extent of a single glacier.—Dr. RICHARDSON observed, that snow constantly disappeared in great quantities without melting; in dry frosty air, with a temperature below zero, it would disappear rapidly by insensible evaporation. The prismatic form of ice, which occurs on lakes where it has attained a thickness of six or eight feet, takes place only in the spring when it begins to melt; the particles were considered to undergo a new arrangement when the temperature of the mass was elevated to the melting point.—Colonel SABINE had seen the ribboned structure of glacial ice mentioned by Professor Forbes, but doubted whether it had ever been seen in polar ice; he had never met with it, and did not think it would have escaped his observation.

ON STRAIGHT AXLES FOR LOCOMOTIVES.

BY CHARLES VIGNOLES, C.E.

The Professor stated that an unfounded prejudice existed in favour of cranked axles, which, in his opinion, were inferior to straight ones in almost every point of view. With straight axles the cranks were thrown outside the wheels, which gave more room for the arrangement of the working parts; and another great advantage was gained by lowering the boiler nearly fifteen inches, and thereby increasing the safety of the engine, by placing the centre of gravity nearer the rail. The original expense of the engine and of the repairs was also much lessened. These advantages might be shown by a reference to the Dublin and Kingstown Railway. By introducing straight axles and outside cranks the expenses had been greatly decreased, no accident had ever occurred from breakage; and such increase of room had been obtained, that they had placed the tender underneath the engine, thus fixing the centre of gravity as low as possible, and dispensing with the separate tender. By this arrangement they could run fifteen miles without stopping for water. He had found much difficulty in introducing the straight axled engine on this line; and, in fact, the great obstacle in obtaining a fair trial for different forms of engines arose from the fluctuation in public opinion. Straight axles and cranked axles, four-wheeled and six-wheeled engines, had been used on different lines, not so much from the recommendations of the engineer as in compliance with the opinion of the several railway boards. Just now a prejudice existed against four-wheeled engines, as being less safe than six-wheeled, more liable to run off the line, &c., whereas he contended that the four-wheeled engine *per se* was not open to these objections. He believed that the principal advantage which could be claimed for the six-wheeled engine was in the disposition of the weight on the wheels; and a consideration of the fatal accidents which had lately occurred on the London and Brighton and the Paris and Versailles Railways, would show that they arose from other causes, and had no reference to the engine having four wheels or six. He considered that both accidents arose from similar causes; in both cases heavy trains and two engines were coupled together, the smaller one leading; from some cause a check took place, the engine-man shut off the steam of the leading engine, and the following engine, with the immense momentum derived from weight and velocity, struck against it, forcing it off the rails, and causing the overturn of the carriages. It was considered objectionable to use an auxiliary engine behind a train, because, in case of any retardation of the engine in front, it cannot be checked in time to prevent great concussions of the carriages. Similar objections applied to using two engines under any circumstances, especially when of unequal power. Many accidents had taken place in consequence of the breaking of cranked axles; and M. François and Colonel Aubert, in their report to the French Government, had remarked that the fractures of broken axles, instead of the fibrous appearance of wrought-iron, presented the crystallized appearance of cast-iron, which they attributed to magnetic or electric changes in the molecular structure of the iron, caused by friction in the bearings and great velocities; and, in his opinion, it was probable that the continual strains and percussions to which the crank axle is subjected will account for the changes in the molecular constitution of the iron.—Mr. HODGKINSON was certain, from the results of his experiments, that a succession of strains, however slight, would produce a permanent deterioration of the elasticity of the iron.—Mr. FAIRBAIRN had been told by the engineer on the Leeds line, that he considered all crank axles to be constantly deteriorating from percussions, strains, &c., and that they should be removed and replaced by new ones periodically, to avoid danger of fracture.—A discussion arose as to whether the crystallized appearance observed in fractured axles arose from defects in the manufacture, in the quality of the iron, or from the effects of working, either by percussions, strains, or magnetic action.—Mr. GRANTHAM, although a manufacturer of cranked axles, admitted that straight axles were less liable to break. Cranked axles, from the way in which they were welded together and shaped, were rendered weak and liable to fracture. On other grounds, however, he believed that the cranked axles were preferable, as they produced a steadier motion, and much heat was saved.—Mr. GARNETT believed that more straight axles had broken than cranked ones.—Professor WILLIS showed the effect of vibration in destroying molecular arrangement, by reference to the tongues in musical boxes, &c.

Mr. NASMYTH believed that the defects in axles, &c., arose in the manufacture, especially from cold swaging and hammering, and also from overheating in welding, all of which causes injured the toughness of the iron. In small articles he found great advantage from annealing; and he believed that axles might be annealed very cheaply, and would be more serviceable. He disliked the fashion of referring all unexplained phenomena to magnetism and electricity, although he was convinced that very singular electric phenomena accompanied the transit of locomotives and the rapid generation of steam. With this was connected the non-oxidation of rails, where the traffic was in one direction, and the rapid oxidation when the same rails were travelled over in both directions, as in the Blackwall Railway. He had also observed that brasses, in some cases, had from friction entered into cold fusion—that is, at a heat not perceptible to the eye, a complete disintegration of the molecular structure had taken place, and he had seen the brass spread as if it had been butter or pitch. He had no doubt that this arose from electricity, but had not ascertained the fact from experiment.—Mr. FAIRBAIRN stated, that in hand-hammered rivets the heads frequently dropped off, and presented a crystallized appearance, while those compressed by machine were sound. He found that repeated percussions, from the rivetting, hammering plates, &c., induced magnetism in iron boats.—Mr. VIGNOLES could not, from his experience, agree to Mr. Nasmyth's theory of the oxidation of rails by single traffic, as the railway from Newton to Wigan had been single for a long time, and was as bright as the Manchester and Liverpool. The Blackwall Railway was not an analogous case, as no locomotives were employed.—Mr. ROBERTS disbelieved the deterioration of axles by work; he would rather trust an old axle than a new one. He believed cold swaging and hammering to be the chief causes of mischief. In fact, if axles were sent out sound and well manufactured, they would rather improve by working.

COMBUSTION OF SMOKE.

Mr. C. W. WILLIAMS made a communication on the subject of the mode of testing the efficacy of plans for the combustion of smoke. In opening this subject, Mr. Williams said, that the usual mode of testing the efficacy of different modes of preventing smoke was by ascertaining the quantity of water evaporated in a given time, or with a given amount of fuel, than which nothing could be more fallacious. Boilers were so exceedingly different in their properties, and presented results so exceedingly different, according to the mode in which they were worked, that they could not be relied upon for this purpose. Mr. Williams referred to a number of experiments made by himself, Mr. Parkes, and Mr. Wicksteed, for the purpose of showing, that, with quick and slow combustion of coal, the quantity of water evaporated with a given amount of fuel from the same boiler and the same furnace, varied exceedingly; where the combustion was slow the quantity of water evaporated by a pound of coal was sometimes nearly double that which was obtained by quick combustion. In order, therefore, to ascertain the value of any process for promoting combustion, it would be necessary to discard the boiler, and to go to the furnace itself, in order to ascertain what was the quantity of heat generated. For this purpose, an exceedingly ingenious and simple apparatus had been devised by Mr. Henry Houldsworth, to which allusion had been previously made; and by the use of which the temperature of the flues of a steam-boiler could be determined, and the relative value of the furnace, and the mode of working it, satisfactorily ascertained.—Mr. NATHAN WADDINGTON said, that he doubted the correctness of the results to be obtained by means of Mr. Houldsworth's invention. No doubt, when air was admitted at the bridge of the furnace, as in Mr. Williams's patent, and consequently a part of the combustion of the coal carried on there, instead of in the front of the furnace, the flue might be hotter, but the furnace itself would be cooler; and the effect of the whole in the generation of steam might be smaller.—Mr. HOULDSWORTH said, that since the discussion on this subject, which took place on Friday last, he had made some careful experiments with the pyrometer which he then described; and the results were, in his judgment, exceedingly satisfactory and conclusive. These experiments were made upon a furnace fitted up according th Mr. Williams's patent, by putting 3 cwt. of coal upon the fire two different times, the fire being each time in the same state, and the temperature of the flue, as indicated by the pyrometer, being, in each case, about 700 degrees. On one occasion the air passages were left open, in the other they were closed; in each case the experiment was continued for 100 minutes. In the experiment in which the passages were left open, the average temperature of the flue was about 1100 degrees; in that in which the passages were closed, and Mr. Williams's apparatus thrown out of use, the temperature averaged only about 900 degrees. During the whole time of the former experiment, there was an entire absence of smoke; during great part of the latter, the flues were filled with smoke.—Mr. Houldsworth exhibited a diagram, showing, in a very striking manner, the results of his experiments.—Mr. FAIRBAIRN said, there could be no doubt whatever, that smoke might be most effectually prevented; and, therefore, the public ought no longer to be subjected to the grievous nuisance which now too extensively prevailed.

ON THE IRREGULARITIES OF SURFACE IN THE MAGNESIAN LIMESTONE FORMATIONS.

BY DR. DAUBENY.

The Doctor, in the course of last autumn, was struck with the appearances presented by the magnesian limestone rock of some of the quarries on the eastern borders of Derbyshire. Both the upper and under surfaces of the blocks, instead of exhibiting that plane or slightly undulating outline which is commonly perceived in a block of stone consisting of limestone, were, on the contrary, chequered with a series of small alternate depressions and elevations, producing, both above and below, a number of sharp projecting points, or of little rounded protuberances, sticking out from the surface of the block. These appearances had been briefly noticed by Professor Sedgwick, who assumed, that they arose merely from the arrangement of the particles of the rock, which took place in the act of its consolidation. Within the last few days, while on his way to Manchester to join the association, the doctor had examined in detail one of the most remarkable quarries now worked in the magnesian limestone, in the part of the country in question. After describing some peculiarities in the blocks, the doctor suggested that the appearances bore a recognisable resemblance to those produced on a vertical face of rock at Roche Abbey, which had been exposed to the elements for a considerable period of time. The vertical face of the stone presents a great number of holes, punctuating into the substance of the stone, showing at least a disposition in the stone to be acted upon and corroded by atmospheric influences. Professor Sedgwick's explanation of these to the configuration which the stone spontaneously assumed during the act of consolidation may be the true one; but it seemed hardly admissible, without a more careful investigation of the phenomena, and a comparison of them with the principle assumed. Dr. Daubeny produced a piece of the dolomite of the Tyrol, bearing out his views. The serrated and extraordinary peaks, in certain valleys of the Tyrol, were usually attributed to volcanic action; but they might perhaps be more truly referred to the action of the weather on the composition of the stone, which had not removed them in rounded masses, but in the shapes in which they were. The surface blocks at Alston might be regarded as miniature representations of the serrated peaks of the Tyrol.—Professor JOHNSTONE examined the specimens, of which, he said, he had met with none in his county (Durham). From the appearance they presented, Dr. Daubeny was probably right, in referring them to the action of the carbonic acid of atmospheric influences.

INSTITUTION OF CIVIL ENGINEERS.

JUNE 28.—"An Account of the Bridge over the Thames at Kingston, Surrey," by Mr. Birch, gave a clear concise history of the construction of a convenient and useful bridge, which, by the reports of Mr. Telford upon it, appeared to be a good design by Mr. Lapidge, well executed, with the rare merit of being built within the estimated cost. The drawings to illustrate the paper were remarkably well executed.

The paper on "A Self-Acting Signal for Railways," by Mr. Charles Berwick Curtis, was a description of an useful invention for preventing collisions between railway trains; the signal has been in action upon the Great Western and the London and Birmingham lines, and is stated to have answered perfectly. The machinery appeared simple, the signal very evident, and its use would permit the policemen to extend their sphere of inspection upon the line, without confining them to one spot, as at present. All these points are very desirable of attainment, and the public will be much indebted to Mr. Curtis if he succeeds in bringing his simple, but useful, invention into general use.

The paper by Mr. Davidson, describing the "Well at Messrs. Truman, Hanbury, and Co.'s Brewery," which was sunk by Mr. Clarke, of Tottenham, under the author's directions, for obtaining a supply of water from the chalk, gave the details of a bold attempt to form an entire cylinder of cast-iron from the surface down to the chalk, a depth of nearly 200 feet, in order that the several kinds of springs might be admitted at the various levels. The work was commenced in a large land spring well, sixteen feet diameter, and after the influx of water and sand prevented the men from sinking by hand, the process of "minering" was resorted to, and the work carried on under water, the cylinders sinking as the well was excavated. Several casualties occurred, which were met with skill and success, and the result has been, that although a less copious supply of water has been obtained than at the well of Messrs. Reids brewery (which was described a short time since by Mr. Braithwaite), yet in the two years which have elapsed since its completion it yields a good constant supply, and there is not any symptom of sand entering the shaft.

The "Description of the Calder Viaduct, on the Wigtown and Cultness Railway," by Mr. Macneill, gave, in addition to the details of construction of the wooden trussed frames of the arches of the viaduct, a very extensive series of experiments on the deflection of the beams, which will form an extremely valuable work for reference, as a guide in similar works. The work was curious, from being constructed upon an economical scale to suit a limited traffic, but with every facility for widening the viaduct without interfering with the passage of the trains, when the increased trade should render it necessary. The drawings, by Mr. G. Ellis, illustrating the paper, were well executed, and were much in detail.

The "Description of the Harbour of Port Talbot, in Glamorganshire," by Mr. H. R. Palmer, was an interesting account of the effect that may be produced by judiciously directing the operations of Nature. The harbour is situated on the eastern shore of Swansea Bay, at the outfall of the river Avon which is fed by the streams from a mountainous district, and traverses an extensive marsh in its progress to the sea. The manufacture of copper and tin plate increased so rapidly as to render improvements in the course of the river necessary. Some spirited individuals, with Mr. Vigors at their head, undertook it, and, under the author's directions, a sea lock, forty-five feet wide, was erected, several improvements in the course of the river were executed, and a new direct channel for the river to the sea was decided upon. This was effected by cutting a trench through the marsh land twenty feet wide by ten feet deep, into which the mountain torrents were directed, and in their impetuous course they ploughed away the bottom and sides of the restricted channel until it became large enough to contain the whole body of the river, which is now turned into that track, and a free access formed to a commodious harbour, calculated to the wants of the rising port. All the details of this interesting work were given, and they appeared to have been conducted with skill on the part of the engineer quite commensurate with the boldness of the original idea of using the powers of Nature to accomplish a work of art.

The meeting being the last of the session, the monthly ballot took place, when the following noblemen and gentlemen were duly elected:—The Dukes of Wellington and Buccleuch, the Marquis of Northampton, Lords Lyndhurst and Brougham, Sir Robert Peel, the Right Hon. C. Shawe Lefevre (Speaker of the House of Commons), Professor Airy, and Dr. Robinson (of Armagh), as Honorary Members; W. C. Mylne as a Member; and Messrs. Wilkins and Bennett as Associates.—The meeting adjourned until the second Tuesday in January, 1843.

REVIEWS.

Iron as a Material for Ship-Building. By JOHN GRANTHAM, C.E. Simpkin, Marshall, and Co., London.

The volume before us is one of the most comprehensive papers which has been published on the important subject of the application of iron to maritime purposes, and which was read at a meeting of the Polytechnic Institution of Liverpool, when the mayor, the chairman of the dock committee, and many scientific men were present. It may be observed that Mr. Grantham is of the firm of Page and Grantham, iron ship-builders in Liverpool, and that gentleman's attention having been directed to the subject in 1824, he brings to the consideration of the question eighteen years practical experience, and the result of his observations; but it is right, however, that Mr. Grantham should speak for himself, and, in the brief review we may take of his communication, we shall endeavour to notice the principal points, leaving it to those immediately interested in the question to refer to the work itself, which is not only valuable as containing much original and authentic matter, but is interesting as a treatise on a subject of growing importance, and which may be said to be of deep and general interest. Mr. Grantham, in his preliminary observations, states that in the absence of any published documents, which would enable him to collect data, he determined on trusting to his own resources, carefully giving the result of his own observations, and availing himself of such assistance as might be rendered by friends practically acquainted with the subject. It appears that the first construction of iron vessels is by no means of so late a date as is generally supposed, iron boats, for navigating canals, having been built so long back as forty years; and it is stated on the authority of a friend of Mr. G.'s, that iron vessels had been known to have been at work twenty-eight years, which certainly is good proof of their lasting properties. The first iron steamer "that ever put to sea" was called the *Aaron Manby*, which was constructed at Horsley, under the direction of Mr. Manby, the projector, who was assisted by Capt. (now Admiral Sir Charles) Napier. She was sent to London in parts, and put together in dock, and Capt. Napier, having charge of her, navigated her direct to Havre, and thence to Paris, without unloading any part of the cargo (consisting of linseed and iron castings), she being the *first and only* vessel of any description that ever went direct from London to Paris. The second iron vessel was also built by the Horsley Company, under the superintendence of Mr. Grantham, sen., which was put together in Liverpool, in 1828, and crossed the Channel, proceeding to her destination, Lough Derg, on the river Shannon; since then she has been *constantly* at work, and *is now* in good condition. It is of interest to learn that this vessel was the origin of the extensive and spirited company which now navigates that splendid river, conferring important benefits on the large tract of country through which the Shannon flows; and here we may offer the meed of praise so justly due to Mr. Charles Wye Williams, to whose foresight, and on whose recommendation, iron vessels were first adopted by this company, there being now six at work, two of which are in salt water. Mr. John Laird and Mr. Fairbairn also very early took an interest in iron vessels, which have of late come into very general use, plying on the Thames, the Mersey, and the Clyde, while some of a larger and stronger description are employed in sea voyages. Of the iron steamers running between Liverpool and Glasgow the *Princess Royal* is the largest, being upwards of 800 tons, and is unequalled in speed, as a seagoing steamer. We believe it was this boat which lately made the passage from Holyhead to Kingstown and back in about nine hours, or four and a half hours each trip; while iron steam-vessels are to be found fighting our battles in the East, the *Nemesis* and *Phlegethon* (built by Mr. Laird) having taken a prominent part in the Chinese war. Iron sailing-vessels have also made voyages both to the East and West Indies; and the *Ivanoide*, the first iron sailing-vessel of any magnitude employed for sea voyages, has made three trips to and from South America, and fully realises the expectations entertained. Mr. Grantham proceeds to notice the proposition of Mr. Holmes, C.E., to construct large iron steamers for the communication with India and the Red Sea. Although the author does not agree with Mr. Holmes as to the profits contemplated by that gentleman, he admits that his general views appear to be correct, and that he certainly deserves credit for his exertions, although they have not been attended with success. The report of Mr. Holmes, it is observed by Mr. Grantham, "would receive much more attention now than it did at the time of its publication, as it is very evident that he judged correctly as to the comparative merits of wood and iron vessels for long voyages." In the construction of iron vessels, Mr. Grantham observes, the principle is comparatively new, while there is still much room for ingenuity and practical skill. The following passage is highly creditable to the author, who, throughout the paper, evinces a liberality of sentiment which we wish was more general. Mr. G. thus proceeds:—"I consider it to be necessary that the public should be made acquainted with the general principles on which we proceed, as the best means of giving confidence to the shipowner, and extending the demand for vessels of that material. I am convinced, moreover, that it would conduce to our mutual interest to communicate to each other more freely the results of our experience, in order to insure, as much as possible, the introduction of every improvement, and thereby promote the employment of iron-built ships." As regards the construction, we find that no uniform plan has yet been adopted for the keels, which are made of various forms, according to the object to be attained in the respective size or adaptation of vessels, or the opinions of the builders. Various plans have, it appears, been adopted in constructing the stem and stern posts of iron vessels, which are referred to with explanatory diagrams, but we do not propose entering into the detail of iron ship-building, but merely give a digest, or outline, of the work under notice. The floorings, the side frames, gussets, mode of plating and jointing (on which some useful suggestions are submitted), single and double rivetting (a matter which appears to be of importance), deck beams, bulk heads, and the use of iron extended to other parts, are severally treated upon in a practical manner. We were somewhat surprised to learn, that even iron masts have been, in more than one instance, adopted—one having been in use for more than twelve years in the *Ballinasloe* steamer, without sustaining any perceptible loss in its strength, while it serves as a *ventilator* to the cabin. Mr. Grantham discusses the important points connected with ship-building, which he holds to be—1, strength, combined with lightness; 2, great capacity for stowage; 3, *safety*; 4, *speed*; 5, durability; 6, economy in repairs; 7, cost; and 8, draft of water; and then proceeds to adduce evidence in proof of his assertion, that iron vessels possess, in an eminent degree, a superiority over wooden vessels, and which we think he well establishes. We make the following extract, as corroborative evidence of the value to be attached to the use of iron in preference to timber in ship-building:—"Can there be, I may ask, a stronger argument in favour of iron than the fact, that those who have thus acquainted themselves with its capabilities, and, either from necessity or conviction, have adopted it, have, almost without exception, been kind in its praise, and have shown their sincerity by not returning to the use of wood?" The paper, we repeat, is deserving of attentive perusal, and, as it affords ample opportunity for extract, we shall hereafter select such parts as appear to be of general interest for insertion in our columns.

CAST-IRON BUILDINGS.—Buildings of cast-iron are daily increasing at a prodigious rate in England, and it appears that houses are about to be constructed of this material. As the walls will be hollow it will be easy to warm the buildings by a single stove placed in the kitchen. A three-story house, containing ten or twelve rooms, will not cost more than 1150*l.*, regard being had to the manner in which it may be ornamented. Houses of this description may be taken to pieces, and transported from one place to another, at an expense of not more than 25*l.* In the little town of Everton, near *Liverpool*, a cast-iron church has been recently built, having a spire of the same material, the total cost of which was 4000*l.*; the church is 116 feet by 39; it is built in the gothic style, and is painted in imitation of stone. It is said that a large number of cast-iron houses are about to be manufactured in Belgium and England, for the citizens of Hamburgh whose habitations have been burnt.

POWER OF STEAM.—It is on the rivers, and the boatmen may repose on his oars; it is on the highways, and exerts itself along the courses of land-conveyance; it is at the bottom of mines, a thousand feet below the earth's surface; it is in the mill and the workshops of the trades. It rows, it pumps, it excavates, it carries, it draws, it lifts, it hammers, it spins, it weaves, it prints.—*Webster's Lectures.*

PUBLIC COMPANIES.

MEETINGS.

Consd. Copper Mines of Cobre	26, Austinfriars	July 11	1.
Arigon Iron and Coal Company	9, Liverpool-street	12	1.
Union Bank of London	Bank-house, Mourgate	12	12.
Deptford, &c., Gas Light Co.	London Tavern	16	12-1.
Royal Santiago Mining Co.	88, Broad-street Buildings	18	1.
Rio de Anoti Gold Stream Works	George and Vulture Tavern	18	1.
Fort Gloster Mills Company	Office, Lombard-street chambers	19	12.
Birmingham & L'pool Junc. Canal	Talbot Hotel, Shrewsbury	21	1.
Chester and Birkenhead Railway	Talbot Hotel, Shrewsbury	21	1.
United Mexican Mining Assoc.	London Tavern	27	1.
Sheffield Gas Light Company	Town Hall, Sheffield	28	11.
Ellesmere and Chester Canal	Office, Ellesmere	29	1.
De Dunstanville Mining Co.	Office, 26, Birchin lane	29	2.
London and County Banking Co.	71, Lombard-street	Aug. 4	1.
Hibernian Mining Company	6, Austinfriars	5	1.

CALLS.

London and Birmingham R'way	16*l.*	July 11	As former calls.
Grand Junction Railway	2*l.* 10s.	11	Barclay and Co.
West Wheal Jewel Mining	10s.	25	London and Westminster Bank
Paris and Rouen Railway Co.	2*l.* 10s.	12	Stones, Martin, and Stones.
Cambrian Iron and Spelter Co.	2½*l.*	Aug. 2	London Joint-Stock Bank.

DIVIDENDS.

National Bank of Ireland	6 per cent., 12, Old Broad-street	July 11.
Grand Junction Water works	(as usual), at the office	15.
National Provincial Bank of Eng.	6 per cent., at the office and branches	15.
Provincial Bank of Ireland	8 per cent., 42, Old Broad-st.	15.
South Australian Company	4 per cent., 4, New Broad street	15.

NOTICES TO CORRESPONDENTS.

We are obliged to "O. P. Q." for the statement forwarded, which we hope to have continued, together with any other particulars with which he may be acquainted.

The Lectures of Professor Phillips on Geology will be continued in our next.

Leeds Report.—The letter of Messrs. R. B. Watson and Co. did not reach us in time for our present Number.

Important Railway Case.—We are indebted to our contemporary, the *Railway Times*, for our report of the decision in the long-litigated case, "Pickford *v.* the Grand Junction Railway," inserted in another column.

Anglo-Mexican Mining Association.—*Errata.*—In the extracts given in last week's Journal, line 15 from bottom, "ley of gold 1·471 and 1·461 grains," should be "1471 and 1461" (and decimals); last line but three, after "the mine of San Bernabe," add "the mine of La Luz," &c.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JULY 9, 1842.

The remarks made in our last Number on the "*Miners'* Company," for such we have ever considered, and so styled, the body trading under the designation of "The Governor and Company of Copper Miners in England," have, we find, not only attracted attention, but, we regret to learn, in addition thereto, been misinterpreted in some quarters, while false inferences have been drawn, and the real meaning of our observations perverted, in a manner which neither reflects credit on the one party for common sense, or the other for honesty.

Having ever manifested an interest in the success of a measure which we sincerely believed to be well calculated to benefit the working miner and mine adventurer—at the same time, destroying the monopoly which existed, and which has ever proved the bane of the mining interest—we have availed ourselves of every opportunity of directing attention to the objects of the company, with the earnest desire of recording its success, but without any bias in its favour, which might lead us to cloak abuses, or hide any deformity which might present itself. As evidence of the straightforward course of action we have pursued, we have only to refer to the articles which have appeared in our columns, *pro* and *con*, not omitting that of last week, which we feel called upon to justify. To do this in an efficient and satisfactory manner, it becomes necessary that we should explain more definitively than we have yet done the opinions we entertain, having confined our observations last week to a brief notice of those facts which were too notorious to require any aid on our part in giving them publicity—while a duty was imposed on us of bringing before our readers those most material which presented themselves to our notice.

Having, then, submitted merely the main points to which we wished attention to be directed, rather than enter into detail, or give insertion to correspondence which treated more minutely on the question, we hoped that the object in view would have been achieved, and that the Miners' Company, as purchasers of ore at public ticketing, would assume that position which we consider they were entitled and bound to do, both as regards the interests of the shareholders and the mine adventurers—and, moreover, that they would have shown Mr. Michael Williams that his conduct at the ticketings could not be allowed to pass by unnoticed. It was only in the absence of any act on the part of the company that we came forward as supporters of the working miner and the mining interest, and it must now be our endeavour to justify those remarks of which complaint is made, without regard to the motives which may have influenced parties in misrepresenting or confounding the statements or opinions we have expressed.

We have inserted elsewhere the letters of two correspondents treating on the subject; with the one we are ready to admit that the real cause of the present position of the Miners' Company is the efforts of the smelters to destroy them—the pusillanimity of the miners themselves—and the want of energy on the part of the company. The latter have it in their power to foil their adversaries if that they went properly to work, but with such *evidence* as they have afforded of their desire to protect the miner—abstaining from taking any part in his favour, in all the discussions which have arisen on subject of the tariff (for Mr. W. R. Vivian acted throughout in his individual capacity, and was not supported by his co-directors or proprietors as a body), how can it be expected that the miner will run the slightest risk, although the prospect of gain may be held out to him, and more especially when such hope comes from a quarter which has proved, by its acts that, instead of being the miner's friend, the company are smelters at heart, although miners by profession. Let the Miners' Company only perform their engagements to the miner—and, at this moment, more than ordinary exertions are required, on the part of the miner, to protect himself, or, at least, put off the evil day—and we feel assured that the company will not only prosper, yielding a profitable return on the capital invested, but will also be hailed by the miner as his safeguard and protection.

It may be said, that, to effect all this, when the credit of the company is brought in question by Mr. Michael Williams at a public ticketing (which, however, ought to have no effect, as he equally refused notes, or gold, which were tendered at the time), it behoves the company to look to their coffers, and see that they can carry on the war, until they place their adversaries in a position which will oblige them to cry for quarter. That this may be effected by raising additional capital we do not doubt, for, supposing Mr. Michael Williams should carry his threat into execution, and not bid at Cornish ticketings, we would like to ask that gentleman how he will carry on his smelting works?—how will he obtain a mixture for his foreign ores? If the miners had any spirit, they would at once say, "If you will not take our ores at one ticketing you shall not at another. If that you withdraw yourself as a purchaser at ticketings, we are equally as independent, and we can do without you." If such were the language used by the miners, even Mr. Michael Williams would, for the sake of gain, become most humble—beg pardon, and promise not to offend again. Will the miners do this? We have a clergyman to stir them up to look to their own interests, and probe themselves as regards the tariff—and we are told that the petition to the queen, referred to in our last, has been signed by 10,000 individuals. Let them if now off the yoke of the smelters, and tell them boldly that the destruction of the Cornish mining interest must be that of the smelters. It is only by such home arguments that any good can be effected.

We must now proceed to absolve ourselves from the charges preferred against us, and at the same time place the Miners' Company and its opponents in their proper position. In the Journal of last week we noticed Mr. Michael Williams's conduct when presiding at the ticketing held at Pearce's Hotel, Truro, on the 26th of May last; this was remarked upon in our columns of the 4th of June following, and yet no notice was taken by any member of the Miners' Company.

Having done our duty, we remained silent until the letter of a correspondent, inserted last week, again called our attention to the subject, and we, thereupon, made inquiries, which we considered warranted us in the observations then made, and we will here repeat them. In the first place, Mr. M. Williams "libelled" the company—he refused to take their bills or even their cash—he being in the chair (and we have seen men who he would not trust with a barrel of powder, taking the same seat at other ticketings), and not content with so doing, he further stated distinctly that if the ticket, or "bid," of the Miners' Company were accepted by the agents of the mines, he would withdraw those of the firm of which he was a partner. Was there ever anything more dictatorial, more arbitrary, than this conduct of a man who knew and felt his power as an adventurer, merchant, banker, and smelter, not to observe on his being the agent or representative of "lords'" interests? Our object in the remarks of last week was to arouse the Miners' Company to a sense of proper feeling—they have displayed an apathy which is discreditable, to say the least.

We now approach a more tender subject—that of the financial affairs of the Miners' Company, and our correspondent tells only the truth, when he says that we know nothing of the accounts of the company. We confess we do not; we only guess by their advertisement for loans of money on debentures, and which appeared in the advertising columns of our last Number. We believe there is but one opinion as to the impolicy of the advertisement appearing immediately after the manifestation of feeling displayed at the ticketing, although, perhaps, it may be said by some that it is better to take "the bull by the horns," while others (and we are amongst the number) complain of the terms, or style, in which the advertisement is drawn. That there is ample security to the debenture holders, no doubt can, for a moment, be entertained, as the capital embarked, the plant and property of the company, with the responsibility of the chairman, directors, and shareholders, is, in each case, ample security for the amount required; but we did feel it right to direct attention to the position in which the company is placed, and while we are anxious that they should be in a state to carry out their operations on an extended scale, we felt, at the same time, that they should be told—and we tell them again—that, to succeed, they must be "*The Miners'* Company"—in any other light we leave them to the winds.

The system of payment of dividends out of capital, and not from profits, has ever been decried by us, being calculated to mislead the shareholders and the public as to the value of the undertaking, and, which although temporarily supporting the prices of shares, must ultimately have a most injurious effect on the property, not to remark on the character of the management which descends to acts of this nature. A correspondent directs our attention to the accounts of the "Goginan" Mine, an abstract of which appeared in the last Number of the Journal, and we have, for the satisfaction of that gentleman, and others interested (whether in this particular mine or others under the same management) appended to his note a copy of the accounts rendered at the annual meeting of adventurers, so that no question can arise as to the fact of the dividends paid exceeding the net receipts or surplus returns to the extent of 1551*l.* 18s.—being the deficit or balance against the company.

We cannot but imagine, however, that some explanation can be afforded, which will in a measure remove the impression which the payment of dividends on a losing concern, in anticipation of future profits, is calculated to make, as it must be clear that monies could not be paid without there was a surplus or other fund belonging to the company from which the amount was abstracted, it is, therefore, in the hope that some satisfactory explanation will be rendered that we withhold those observations which the case would appear to call for. There is one circumstance remarked upon by our correspondent—viz., the dates of payment of the dividends, and the state of the mine at the respective periods. It will be seen, on reference to the accounts, that the mine was in a productive state from March to August inclusive—fully justifying dividends being declared, and that it was not until September and October months that a loss took place, amounting to 1593*l.* 6s. 5d.—the cause of which is explained in the report accompanying the accounts; and as heavy charges were incurred during those and the succeeding two months, which do not apply to the regular working of the mine, the directors might have felt themselves justified, from the prospects which were presented, in making an advance to the extent of 500*l.*, for it will be seen that, although the balance against the mine on the 31st of December was 1551*l.* 18s., yet that the greater part of such loss (1058*l.* 15s. 11d.) arose from the expenditure on the mine in the months of November and December, during which period no further dividends were declared. This appears to us to be the best construction which can be put on the case in the absence of other information than that presented by the accounts, and thus we leave the subject for the present week.

The bill for the regulation of mines and collieries, introduced in the House of Commons by Lord Ashley, has been read a third time and passed, after some remarks from Mr. Ainsworth and other Members on the clause limiting the employment of children under a certain age to three days a week. The opposition was withdrawn, under the expectation that this subject will be taken up in the Upper House, where it is expected to meet with more attention than the Members of the House of Commons seemed disposed to give it, and which, by the proceedings in the House of Lords last night (noticed in another column), appears to be the case. We fully agree with the views entertained by Mr. Attwood and other Members, that to confine the work of boys to alternate days would be to inflict an injury without any corresponding benefit being derived—the loss must fall upon the parents, from the limit put on the labour, while they would have to support or provide other employment, besides the means of education, for one-half the week, which, in most cases, would be attended with difficulty. Again, if boys be required underground, the colliery proprietor must have a double gang, or corps, and while no disadvantage will attend this alteration, where boys are to be met with, yet in other districts, we apprehend, the effect would be to limit the labour of the colliers themselves, and thus create greater distress than at present prevails. A contemporary (the *Morning Chronicle*) tells us that the only effect produced by the non-employment of boys, will be that men will perform their duty, and hence, although the weekly earning of the boy is reduced, that of the collier will be increased; and if it is was merely confined to this question no objection would arise, but there is another (one, indeed, which cannot be overcome), we refer to the thin coal seams, where those employed as "putters," and to "rally" the coal to the pit bottom, are necessarily boys—men being unable to do the work. Thus it is clear, if there be not a sufficient [illegible] of hands to keep the pit going, the men will be kept idle [illegible] should be a limit we are free to acknowledge, and we think that a certain number of hours, or at least four days in the week, without reference to the particular days, might be determined upon without any evil arising therefrom.

We trust that, Parliament having directed its attention to the subject, and Government having partially expressed its approval of the measure, some provision will be made whereby the children on their "play days" may have their minds at least employed, by educational schools being erected in the several districts—otherwise, to employ children alternate days, and leave them without any resource, the other portion of their time, it is to be feared that, instead of being brought up to a life of industry, habits of idleness will be acquired, and that they will not derive that benefit which is contemplated by the Legislature. We hope, therefore, that the subject will be duly considered, and the practical evils which must attend the bill, if framed in its present shape, pointed out to their lordships when the clauses of the bill come under discussion—who, we have every reason to expect, will not hastily pass a measure of so important a nature to the labouring classes without first satisfying themselves of its propriety. Mr. Gladstone, the Vice-President of the Board of Trade, who is deemed a high authority in all matters connected with the tariff, whether as regards mines, manufactures, commerce, or agriculture, has put his *veto* on Lord Ashley's bill, for he voted against it. Whether his vote will have any weight in the Upper House remains to be seen. On certain points no question can arise—on others it is only practical men who can determine. The observations of the Duke of Wellington last night in the House of Lords will not be lost sight of by our readers, while we have only to express our hope that, while alterations which are necessary should be made, the bill will be allowed to pass in the present session. The reports of certain of the sub-commissioners require investigation, and it appears by Lord Hatherton's motion, that such will, in all probability, take place.

TRAFFIC ON RAILWAYS.

The following table (compiled by Mr. R. Dawson, of Liverpool) shows the gross receipt of thirty-eight railways now in operation, from the 1st of January to the 25th of June last, inclusive:—

London & Birmingham	£30,779	13	11	Hull and Selby	£1,569	9	6
Great Western	311,960	4	2	Eastern Counties	21,369	6	0
Grand Junction	296,723	9	6	London and Blackwall	20,519	14	9
London & South-Western	137,100	6	1	Brandling Junction	20,272	11	11
Manchester and Leeds	108,800	13	2	Dublin and Kingstown	19,675	1	1
Liverpool and Manchester	107,763	1	9	Manchr., Bolton, & Bury	14,693	18	7
North Midland	106,136	9	8	Chester and Birkenhead	13,617	2	7
Midland Counties	63,856	3	7	Lancaster and Preston	11,428	18	3
London and Brighton	61,261	2	6	London and Croydon	10,641	5	0
Birmingham and Glo'ster	46,702	7	9	Manchester & Birmingham	10,392	5	10
York & North Midland	39,145	13	6	Ulster	9,828	1	6
Newcastle and Carlisle	36,839	4	8	Newcastle & North Shields	9,703	2	1
Edinbro' & Glasg. (18 wks.)	32,146	5	4	Sheffield and Manchester	6,809	13	1
Great North of England	31,136	3	1	Dundee and Arbroath	5,792	15	7
Northern and Eastern	29,269	19	7	Preston and Wyre	4,625	0	1
Birm. and Derby Junction	27,219	0	1	Arbroath and Forfar	4,081	14	9
Glasgow, Paisley, and Ayr	25,345	7	3	South-Eastern (3 weeks)	3,453	12	9
North Union	23,709	18	4	Hayle (18 weeks)	3,792	7	11
Glasgow, Paisley & Greenk.	22,552	8	6				
London and Greenwich	22,189	18	8		£2,031,010	11	9
				Deduct 40 per cent. for working	812,404	0	0
					£1,218,606	0	9

Thus it will appear that, on thirty-eight railways now in operation, for which returns have been published, the gross receipt for six months this year is £2,031,010

From which deducting 40 per cent. for expenses 812,404

Leaves to be divided amongst the proprietors £1,218,606

Mines and Collieries Bill.—In the House of Lords, on Thursday evening, Lord Ashley's bill was brought up from the House of Commons, having passed that House; several petitions were presented against the measure, one by Lord Hatherton, who, at the same time, expressed a hope that at this advanced period of the session the bill would not be pressed; there could, his lordship added, be no objection in any quarter to pass a measure to prevent the employment of females in mines and collieries, but the other portions of the bill required, at least, very mature consideration.—Lord Campbell, in presenting another petition on the same subject, said that he hoped the bill would be passed with the least possible delay.—On Friday (yesterday) Lords Stafford, Howard, and Monteagle presented petitions against certain clauses in the bill; and the Bishop of Norwich presented seven petitions from the colliers employed in the neighbourhood of Wakefield, praying that the bill might pass. The right rev. prelate said he trusted that when the bill should be printed and come before their lordships, it would be considered by them with that attention the importance of the subject demanded.—The Duke of Cleveland also presented several petitions in favour of the bill; he supported the prayer, and expressed his hope that the bill would be read a second time that evening, and passed as speedily as possible; in saying which, however, he did not wish it to be understood that he was opposed to some changes in the details.—After some conversation, the Earl of Devon gave notice that he would, on a future day, move the second reading of the bill, when the Duke of Wellington expressed his decided opinion, that, before taking any steps in the matter, it would be requisite to inquire into the manner in which the printed evidence had been procured, it appearing to him that the terms of the constitution of the commission had been departed from, by the appointment of sub-commissioners; he wished that an alteration in the system should be effected, but it was requisite for their lordships to know something more about the subject before they proceeded to legislate.—Eventually, Lord Hatherton gave notice, that, on Tuesday next, he would move for a select committee, "to take evidence respecting the system adopted in mines and collieries."

The "British Queen."—The Belgian speculation of purchasing the *British Queen*, to run between Antwerp and New York, does not seem to have attained its object, the positive loss upon two voyages performed amounting to 8000*l.* sterling. The cost of the undertaking is also extremely disproportionate to the result. The Belgians appear to be surprised at the majority of the passengers from New York landing at Southampton, but they could hardly have expected anything else. Except for the mere purpose of transit to Germany, Antwerp offers scarcely any inducement for the American commercial traveller, who, under any circumstances, would not omit to pay the first visit to England.

Electric Telegraph.—We learn, with much satisfaction, that negotiations are for advanced for laying down the electric telegraph of Messrs. Cooke and Wheatstone, on the South-Western Railway to Portsmouth. Her Majesty's Government take a very lively interest in the matter. We understand also that the patentees are actively engaged in preparing an apparatus for one of the French railways. We trust the time is not far distant when so valuable an invention will be applied to every principal railway in the kingdom. Upon trunk lines it ought at once to be adopted.—*Railway Times.*

The Iron Trade.—Most of the Welsh works have now a sufficiency of orders, the demand for iron having become comparatively brisk during the last fortnight. We do not, however, perceive that the market has yet exhibited any improvement in prices.—*Silurian.*

Effect of Railways on the Belgian Coal Mines.—The consumption of coal in Belgium has increased tenfold in the last five or six years, in consequence of the establishment of railways, and many collieries, who were formerly much depressed, have realized considerable profits.—*Moniteur des Chemins de Fer.*

The Falls of Niagara.—Mr. Lyell, the eminent English geologist, now on a tour through the United States, has been lecturing on the Falls of Niagara. He supposes that the country above the Falls was, at one time, the bed of a great inland sea, of which the lakes are but small remains; that the barrier at the Falls has been much reduced since the mighty waters commenced their leap from its summit; and that the Falls are receding, and the cliffs lowering, so that, should the world last long enough, there will be no Falls at all at some future time. The conclusion is consolatory to those who would not have the earth deprived of such an august feature, and it makes the calculation safe as regards the reputation of the philosopher. At a period 7500 years hence, he calculates that the Fall will be lower by forty feet than its present height. The loss is little over half an inch yearly, so that the present generation need not fear any great degradation of the scene during their pilgrimage.—*American paper.*

ORIGINAL CORRESPONDENCE.

THE NEW TARIFF—THE MINING INTEREST.

ARE THE MINERS AND OTHERS WHO HAVE BEEN THROWN OUT OF EMPLOYMENT, AND THE MINEOWNERS WHO HAVE BEEN OBLIGED TO ABANDON THEIR MINES, BY THE NEW TARIFF, ENTITLED TO COMPENSATION?

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Your predictions are being fulfilled—abandonment of the mines has commenced—thousands are in want of bread—and a great amount of property has already been rendered valueless. It is, therefore, time to inquire what justice demands for those who have been, and those who may be, deprived of a living? and what those who have had, and those who may have, their property in mines rendered valueless, by recent acts of the Legislature, have a right to claim at the hands of that Legislature?

It is a fundamental maxim of English law and equity, that society shall not inflict injury on any of its members. Society may appropriate the possessions of individuals, but not without making just compensation. The maxim is constantly admitted and acted on, in all cases in which the property of individuals is appropriated to the uses of society—as, for instance, in town and harbour improvements, railways, and high roads. Are, then, the miners who have been, and who may be, deprived of their living, by the New Tariff Act, entitled to compensation? The similarity of capital in labour, and capital in houses, land, machinery, and other material possessions, is generally denied, but the denial is based on untenable arguments. There is no difference between them. Some dozen definitions of capital have been framed, each differing from all the rest, but all are more or less objectionable, and some strikingly indicative that no particular brightness of intellect is necessary to eminence in political economy. Capital, as I define it, with common sense to guide me, is the means of making a living—in other words, of obtaining that which is necessary to existence and enjoyment. Land and houses, machinery, and all other things, are utterly valueless, except as a means of existence and enjoyment—nothing can be clearer. What, then, is the conclusion? Every means of obtaining that which is necessary to existence and enjoyment is capital; labour is a means of obtaining that which is necessary to existence and enjoyment—therefore, labour is capital. Labour, then, being capital—and it being an established maxim in law and equity, that society shall not deprive individuals of their possessions (capital) without just compensation—it follows, as a natural consequence of labour being capital, that, if society stops individuals from labouring the honest labour of their hands, the individuals stopped have a full undeniable claim to compensation. The 5000 men, with the women, girls, and boys, who have been stopped from labouring in the neighbourhood of Truro, not from any fault of their own, nor by any natural cause, but by an act of Government, are, therefore, entitled to compensation; they are all entitled to maintenance, according to the condition they have lived in, until they can again employ their labour with accustomed advantage, exactly on the principle that compensation is made to individuals for loss of property in making a high road or a railway. The cases are strictly analogous, for what is depriving an individual of his land but a depriving him of his present means of living, in whole or in part? It is nothing else, and therein lies the analogy of the cases, as plainly as that all right angles are equal to one another. The position of the miners who have been, or who shall be, stopped from labouring by the new tariff enactment, being thus clear—their right to ample compensation, for loss of labour, being unquestionable—their course is to demand their right at the hands of the Legislature.

On the part of the mineowners, the right to compensation, for loss of property, is so manifest, that it is almost unnecessary to say a word about it. If precedents are good for anything, when might is absent, the right is as palpable as the right of the landowner to compensation for land taken from him, and appropriated to public uses. Here are men, who, on the faith of the law, have embarked immense capital in mining, and who have not yet gained a single fraction in returns for their outlay—here are also other men who have still greater capital embarked in the same pursuit, and who are living on the fruits of their skill and wonderful perseverance and bold enterprise, and who have advantaged society to an incalculable extent—here are such men, without one word of timely warning, stopped in their enterprises, and their property rendered not worth a pin's fee. Why?—For the benefit of society, it is alleged; on that allegation the Ministers of the Crown carried their destructive measures, and on that allegation, the maxim of law and equity, which says society shall not benefit at the expense of individuals, awards compensation. Peel is an accomplished sophist, but cut and shuffle, dodge and turn, wriggle and twist, as he may, in his best fashion, he cannot get over the justice of the rights I urge, however he may manage to stave them off. How many scores of times has compensation for injuries, real or supposed, been demanded and obtained by individuals with far less strength of equity than the miners and mineowners have. Every one acquainted with our political history must be familiar with many instances. Among the most prominent are the cases of George the Third and the Judges, the one having his civil list, and the others their salaries twice augmented—in the latter case nearly doubled—on the express ground that legislative enactments had depreciated the value of money, and, consequently, their incomes. It was a peculiar piece of audacity, to be sure, to claim that compensation on such principle, when every individual income in the community suffered from the same cause; but, if compensation could be claimed and granted for such an injury, on the principle advanced by the King and Judges, how strong the claim of the miners and mineowners must be, even throwing aside the analogy between their cases and the case of the landowner, whose land is taken for a railway, or a dock, or any of the thousand-and-one things society frequently requires individuals to surrender land for. It would be easy to adduce other instances quite as favourable, but the common one of compensation to holders of public offices, when it is found necessary to abolish the offices, and the stupendous compensation of 20,000,000*l.* to the planters, for the loss of their slaves, shall suffice. It would be little difficult to make most telling use of the latter fact in our case, but, as I am rather furnishing hints for arguments, than arguments at length, I leave it to others. With so irresistible a force of equity and precedent to support them, the miners and mineowners in question, if they have the spirit of men, will press a claim for compensation with vigour and determination. I should say, let every individual state his own case—let the House of Commons be filled with petitions—in short, let every constitutional means be taken to obtain compensation, and to annoy the most mischievous statesman that ever influenced the destinies of Britain.

B. DONNAVAND.

Penyorphwyfa Mine, Anglesey, July 1.

SMELTING OF IRON WITH ANTHRACITE—CRANE'S PATENT.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—It was with much satisfaction that I learned, from your useful paper, the judgment in the cause of "Crane *v.* Price." I have the pleasure of knowing both gentlemen, and while I admit the injustice done to the former, I do not quite agree with you as to the terms in which you speak of the latter. I believe that gentleman to be of strict honourable feelings, and that he acted throughout on principle, considering it not an individual question, but one which affected the iron trade generally. I think that the judgment is perfectly consonant with justice, which is not always the case, and I trust that Mr. Crane will now be placed in a situation whereby he may reap those profitable results which he so well deserves, for, during the past two or three years, he has been fettered—his attention has been directed to law, and not to the smelting of iron—and as, at Pittsville, in Pennsylvania, they have smelted sixty-five tons per week with the use of anthracite and hot air, I see no reason why such should not be done in Swansea Valley. The anthracite we possess is, according to analysis, pure in its nature, and, I believe, is of a similar character to that used in Pennsylvania. We may, therefore, hope that Mr. Crane now, having disentangled himself from the meshes of the law, will direct his attention to economy in the working of furnaces with anthracite. The Ystalyfera Company, I suppose, must now look up; the conduct of this company reflects much discredit on the managers and proprietors, who are, I believe, mainly Liverpool people. I have heard strange stories as to the formation of this company, with which a Mr. Manby was connected, and of their having carried on the manufacture of iron with the use of anthracite and hot air, under Mr. Crane's patent, holding him at arm's length, and refusing to pay any patent right, or rent, hoping that, in the cause of "Crane *v.* Price," the defendant would have had a verdict in his favour. Mr. W. Long Wray, in like manner, as stated in your columns, looked to the defeat of Mr. Crane, although he was one who would have been benefitted materially by the discovery, and admitted it in the first instance. Mr. Crane now has the power of not only calling on the Ystalyfera Company for returns of the past, but imposing terms for the future, and it is to be hoped that he will teach this "honourable" company a lesson which they will not easily forget. They have laid out many thousands (some few wastefully)—they have possessed themselves of an anthracite coal-field—they have endeavoured to mulct Mr. Crane of that which was his due—and now it is that gentleman's turn to show to them that their works and colliery are valueless, without a license from him. Let him make his own terms. I hope my fellow-townsmen will join in a public demonstration of feeling on the result of this trial. We honoured Mr. Crane on the success attendant his first working the furnace—let us record our sense of justice and feeling on his first operation in the law courts.

T. T.

Swansea, July 4.

[We heartily join with our correspondent, in expressing the pleasure we feel at the success of Mr. Crane, and hope that he will now be left to work his patent and grant licenses. We have reason to believe that the Ystalyfera Company have acted wrongfully towards him. As a matter of pounds, shillings, and pence, Mr. Crane might be fully justified in enforcing high terms, but we believe him to be too liberal to take an advantage, and we doubt not but that his conduct will form a strong contrast to that of the honourable defendants in the cause lately decided.]

ALLEGED IMPROPER PAYMENT OF DIVIDENDS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The course adopted by you of giving publicity to the proceedings of companies which would wish to be considered as private undertakings, and, apparently, with good reason, if you are correct in the figures given in your last Number, must give satisfaction to all who embark their capital on the faith of the high-standing and reputation of the managers or directors. I refer to your lucid statement of the Goginan Mine—a concern I am by no means acquainted with, nor am I likely to be, after your exposition—and in now addressing you, I shall confine myself to the system which, to use your own words, "must be bad in principle." If I understand the matter rightly, the case stands thus:—The mine gave a profit on the year of 988*l.* 17*s.*, to which is to be added the balance in hand of 2459*l.* 4*s.* 3*d.* at the commencement of the year; this, together with the profit, would be 3448*l.* 1*s.* 3*d.*, which would justify a dividend of the whole, or part, to the adventurers; but it appears by your account, that the amount of dividends paid was 5000*l.*, being an excess over the receipts of 1551*l.* 18*s.* 9*d.* It would be satisfactory to learn from whence this money came—who were the disinterested parties who advanced this sum to pay dividends on a losing concern—for I gather from your report that the mine has been losing money during the last four months of the year; and another question presents itself, which I think worthy of inquiry, as to the date when the last dividend was made, to show whether the concern was then in a prosperous state or otherwise. It may be said that, as I am not an adventurer in the mine, I have no right to trouble myself in the business; but, as I am, unfortunately, a heavy loser under the same management in another company, it behoves me to inquire how 5000*l.* dividends could be paid out of 3448*l.* 1*s.* 3*d.*, for if this be the manner in which accounts are kept by Mr. Taylor, he will, perhaps, justify them, or I shall, in common with others, be disposed to think that dividends are paid to keep up prices, for, after all, it is to the calls and dividends which most of us look to determine on the state of the concern; but if such deception be practised, as this appears to me to be, then farewell to all confidence in managers. I write this in good spirit towards Mr. John Taylor, for whom I entertain a high respect, both for his ability and integrity, and trust that your observations may call forth a justification from that gentleman which may be satisfactory. Leaving the subject in your hands,

I remain, Sir, your's, &c.,

Athenæum Club, July 5. AN ADVENTURER IN MINES.

[We have offered some observations on the subject of the preceding letter in another column. For the satisfaction of our correspondent, we subjoin a statement of the accounts in a tabular form, whereby he will see for himself that our strictures are not uncalled for—indeed, the circumstance of a dividend being made of 1000*l.* at the end of two months (30th October), the loss during which period was 1593*l.* 6*s.* 5*d.*, sufficiently justifies us in directing attention to the circumstance:—

Costs and Returns of Goginan Mine for twelve months to the end of Dec., 1841.

Date.	Net receipts.	Costs.	Loss.	Profit.
Jan. and Feb.	£1433 14 3	£2354 17 0	£921 2 9	—
March and April	5129 8 6	2963 10 1	—	£2555 18 5
May and June	3161 9 0	2767 8 11	—	393 0 1
July and Aug.	4677 4 4	3114 0 7	—	1563 3 7
Sept. and Oct.	2547 7 2	3940 13 7	1393 6 5	—
Nov. and Dec.	2864 16 9	3927 13 7	1062 16 11	—
	£19,826 19 11	£18,938 2 11	£3576 5 1	£4512 2 1
Net profit			£888 17 0	

Cash Account.

Dr.	
1841—April 24—Paid dividend of 10*l.* per share	£1000 0 0
June 26—Ditto ditto, 15*l.* per share	1500 0 0
August 28—Ditto ditto, 15*l.* per share	1500 0 0
October 30—Ditto ditto, 10*l.* per share	1000 0 0
	£5000 0 0
Cr.	
1841—Balance brought from December, 1840	2459 4 3
Profit on mine, twelve months	888 17 0
Balance carried on	1551 18 9
	£5000 0 0

RAILWAY ENGINEERING—LONGITUDINAL BEARERS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—According to the report in your last Number of Professor Vignoles's lecture on the modes of laying the permanent rails on railroads, he stated that he was among the first who recommended longitudinal bearers. It would have been honourable in him candidly to have stated what he knew to be the fact, that I was the very first who gave this recommendation, and denounced, without any qualification, the barbarous system of stone blocks and every other species of isolated supports. * *

Moorgate street, June 29. THOMAS PARKIN, C.E.

P.S.—Why is the professor silent under the strictures made on him by one of the Croydon Railway people, relative to the slips of earth on that line?

THE MINERS' COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—My attention has of late been drawn to the proceedings of this company, from the remarks made in your *Journal* of the 4th of June, and those which fell from you in your last Number, as well as the letter signed "A Constant Reader." Not being in the secret, I can only form an opinion from the statements put before the public through the press, for, in the absence of any refutation, I am justified in supposing the representations so made to be true. It must be clear that the Miners' Company do not stand well in the estimation of the Cornish miner; but, I would ask, has not this been brought about by the smelters, and by their own conduct. The retirement of Mr. W. R. Vigers, who fought so manfully for the working miner, and believed, in common with yourself and others, that much good might be achieved by the formation of the company and the withdrawal of Capt. Joe Lyle, taken together with the remark of your correspondent, that he considered the company "peculiarly unfortunate at the sale of the 23d ult., in having had, as their representative, Mr. J. Lyle," induces me to come to the conclusion that there is a something rotten in the state. That the smelting interest would annihilate the Miners' Company, if in their power, no one entertains a doubt—that Messrs. Vigers, Gilbertson, Benson, and Logan, care not a button for the miner, no one will deny, and that the Miners' Company is not that which its title indicates, is, I believe, acknowledged by every one who knows any thing of matters. The company is nothing more nor less than a smelting company, and the assertions of "R. W." and other correspondents, at the time of its formation, although I did not then agree with them, have been fully borne out by the results. There has been a want of sincerity of feeling towards the miner, and too great a love of lucre. Mr. Vigers I believe to be honestly intentioned in all he does; the bold stand he made in behalf of the working miner on the tariff question will ever be gratefully remembered by us; but where were the Miners' Company? Did they aid him? Did any one of the supporters of the working miner—for as such they courted the co-operation of the capitalist, the adventurer, and the miner—did any one of them, I ask, ever come forward to lend him the least support? You ought to know, Sir, but it is my belief that they thwarted him instead of lending their help, which they were bound, as men of honour, to have done. No, Sir, it is quite clear that they looked to their own interests alone, and this affords one of the best proofs that the tariff will be beneficial to the smelter, and injurious to the miner, and, indeed, was a smelter's question. I observe at the head of the list of directors William Gladstone, Esq. Is this gentleman connected with the Vice-President of the Board of Trade of the same name, as, in such case, it may help to unravel the mystery at present attached to this company? I think it is the duty of all interested in Cornish mines to know the real position of the company, and according as they are deserving of support, to uphold them, or if they be, as I fear, a body of smelters, and not miners, for, as I said, Mr. Vigers, Capt. Lyle, and Mr. Dobree having retired from the direction, then let us leave them to their fate. With apologies for this rambling letter, I remain, &c.,

St. Day, July 6. AN AGENT.

[We regret that there should exist grounds for complaint against the company, and are free to confess that we have, in common with others, been disappointed in the anticipated results. The retirement of Mr. W. R. Vigers speaks volumes, although we are not aware to what cause his withdrawal is to be attributed. We cannot imagine otherwise than that the conduct of Mr. Michael Williams—the pusillanimity evinced by the agents of several mines in listening to him, and acting on his counsel—with the Government measure, and the want of support to the working miner, have combined to disgust him with the concern, and that he has rather retired than remain in a post where the duties devolving on him were neither calculated to give satisfaction to himself or others; while it is only right to add, that we have no reason to believe he has withdrawn one shilling of the capital invested.]

THE NEW TARIFF—INJURY TO THE MINING INTEREST.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—If any evidence were necessary to confirm the view taken by you as to the consequences of the Peel tariff, I think we have it exemplified in the report upon the United Mines, which appeared in your columns of the 2d inst. I shall confine myself to the statement made in the report to which you call attention—viz., that the difference in the standard, as regards these mines, affects the adventurers to the tune of 7200*l.* a-year on returns of 64,000*l.* This one fact is worth a hundred arguments. If that a difference will arise to this company of 7200*l.* a-year—which, happily, is in a state of prosperity—what is to be said of those mines which are working at a loss? and taking the gross amount of sales in Cornwall at a million sterling, we shall find that the loss sustained by the county alone will be at least 110,000*l.* per annum, and this merely to scrape together some 30,000*l.* to 40,000*l.* a-year by way of import duty on foreign ores, at the same time that the Minister imposes on us an income tax on the produce of our home mines.

A CORNISH ADVENTURER.

Chiswell-street, July 4.

ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I request from your correspondents the favour of an answer to the following question, viz.:—A lode was opened on the back in several places, and its course, by compass, found to be 10½° south of east—but this was on the ascent of a steep hill, whose angle of elevation was 16½°, and the lode underlaying northerly three feet in a perpendicular fathom; the continuation of the surface line soon reached level ground, and then a declination, nearly corresponding with the ascent mentioned.

Query.—What is the true bearing, or course, of the lode? and what would be the amount of error in carrying on the line 600 fathoms (horizontal measure), supposing the run of the back of the lode on the ascent had been taken, by mistake, instead of the true horizontal course?

Some of our practical friends may smile at the idea of any man being so utterly void of mathematical light as to adopt the course of the back of an underlaying lode on ascending or descending ground for the true bearing; but I assure you, Mr. Editor, such an absurd case has lately come under my notice, and a pair of mine agents, of great experience and considerable consequence, contended hard with me on this point, and it required direct practical reference to set them right; it may, therefore, be well to demonstrate the fallacy of this wild notion, in order that such a formidable error (so calculated to lead to very serious consequences) may be exposed and guarded against.

JOHN BUDGE.

Callington, July 3.

ANTHRACITE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—It is some time since any remarks from your pen, or those of correspondents, have appeared in your columns on the subject of anthracite, but I trust, now the question between Mr. Crane, of Ystradgwyn, and the Neath Abbey Company is settled as to the validity of the patent, that we shall hear something more. I can well imagine that Mr. Crane was tongue-tied until the judgment was given, but it is to be hoped that he will now, through the medium of your columns—and I know none better—communicate the result of his laborious inquiries as to the advantages of the use of anthracite in the manufacture of iron. I confess I am actuated, in some respect, by self-interest in wishing the properties of anthracite to become generally known; but believing that it will benefit the community at large, and give employment to many in this district, I do not hesitate to call your attention to the subject, and, through you, that of others possessing information and influence. It is to be hoped that we shall now see furnaces erected and our stone coal worked; true it is that the iron trade is depressed, but that, perhaps, is the very reason why we should avail ourselves, at the moment, of any information which may be calculated to effect economy in the manufacture, or an improvement in quality, of the article.

J. WILLIAMS.

Swansea, July 6.

WHEAL SPARROW—CAUTION TO SPECULATORS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—May I take the liberty to state to you a purchase which I was persuaded to make, under the expectation of a quarterly dividend being paid? A gentleman in Liverpool, who holds an excellent situation, of great trust, persuaded me to take five shares in a mining company, called the Wheal Sparrow, in Cornwall, under the above promising appearances, and showed me a letter from a principal banker of Truro, speaking in very high terms respecting the Sparrow Mine. I purchased five shares, wishing to oblige my friend, and paid 62*l.* 10*s.*, at the rate of 12*l.* 10*s.* per share, paid-up capital, which was placed in the Liverpool Borough Bank—Mr. Turner's name being printed on the purchase-copy of my five shares as treasurer, which gentleman, I believe, is Member of Parliament for Truro, in Cornwall. Upwards of four years has expired, and I have never heard anything respecting the above mining concern; I took the liberty once to address Mr. Turner, as treasurer, and he, after a long time, wrote to me, stating that he did not know any thing about Sparrow Mine.

Liverpool, June 25. J. A.

[We believe our correspondent has obtained just as much information as he is ever likely to require. We doubt not, however, but that Mr. Turner, M.P., having acted as treasurer, will feel it his duty to notice the letter, and afford some explanation as to the application of the funds.]

TALACRE IRON AND COAL COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am somewhat surprised that no notice should have appeared in your paper of the motion made by Alderman Copeland at the last Court of Aldermen, to inquire into the charges brought against Mr. Ald. Thomas Wood. It is true, no one seconded the motion, but, as the present Lord Mayor, Sir Chapman Marshall, and Sir M. Wood, with other members of the court, entertain the same opinions as Alderman Copeland, it is a matter of surprise that the question should have been "shelved," and that you should be silent.

MERCATOR.

Cheapside, July 7.

[We have only to observe, that the notification of our correspondent is the first information we have received on the subject.]

MINING STATISTICS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have read with interest your last two Numbers, which contain some interesting information under the head of "Mining Statistics," for which I, for one, have to acknowledge my obligations. Residing, as I do, in the country, I look to your paper for passing events in the mining world, and reports of the proceedings of companies, for it is seldom that I am favoured (except in some cases once a year), with any tidings of the well or ill-doing of the concern. I am in hopes that you will follow up the plan you have commenced so well, by giving us information on other mines. The accounts you quote from appear to me to be made out with much clearness, and are highly creditable to the parties; and here I would beg to draw your attention to an omission in your reports of late of proceedings at public meetings, which, contrasted with the reports you used to give some time back, is to me a matter of surprise and regret—I refer to the absence of the accounts of the company—your reporter contenting himself with giving the speeches and not the accounts. Now, for my own part,

I prefer the latter to the former. While writing on this subject, I may observe on one of the reports in your last Number (a mine in South Wales—I have not your paper at hand to refer to the name), in which, I think, there must be an error, as it is stated that the dividends exceeded the receipts—this, of course, could not be. Your attention will, I dare say, be drawn to the subject by others more interested than, Sir, your's, &c.,

Manchester, July 6. J. R. W.

[Our correspondent will find the mine referred to (Gogians) noticed in another correspondent's letter, as also in some observations on the subject in another column.]

THE MINERS' COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Your editorial remarks of last week, on the affairs of this company, appear to me to be as equally uncalled for as were the laudatory ebullitions which emanated from your pen on its formation, when we were led to believe (or rather you and others would have wished it) that the establishment of the Miners' Company was to be a panacea for all evils to which the miner and mine adventurer were heir to. Such, Sir, is not the case, as I expected, and, as you now admit, I am not going to canvass the merits or the demerits of the Miners' Company or their acts, whether in their individual capacity or as a corporate body; but no question can arise in the mind of any man as to the real position of the case, and I only regret that, with your general observation and power of obtaining information, as well as drawing proper conclusions, you should have allowed the observations you made last week to have appeared in your Journal. Interested only in mines, I naturally watch the movements of the smelters, and it was long before you discovered the secret that I found out the Miners' Company was a smelters company, despite the energy and exertion of the late respected deputy-governor. I most certainly did not give publicity to the information acquired, for I was anxious to retain, so long as practicable—and which I hope may be so long as the mines with which I am connected may last—those advantages, which, I believe, under any circumstances, to attend the smelting of ores by way of commission or per centage by the Miners' Company.

Now, Sir, I do not complain of your strictures on this company, whatever you may think fit to say as to it not having fulfilled its promise to the working miner, for I believe they did not join their deputy-governor in waiting on the Minister, although, perhaps, they might have seen him privately, as did Alderman Thompson, Michael Williams, and some others; but what I do complain of, as a mine adventurer, is, that your comments should extend to the finances of the company, with which, I presume, by your remarks, you must be unacquainted, or you would not so have committed yourself. Let me ask you, Sir, whether dock, railway, and other companies, do not, as a legitimate source of raising capital, resort to debentures? The security in all cases is ample, and, in the present, is so to its fullest extent, for there is not only the plant, and the capital embarked in the company, but there is the individual responsibility of the highly-respected gentlemen forming the direction. True it is that Mr. Vigers has withdrawn (why or wherefore is no business of mine), but the letter V is not the whole alphabet, and I trust that you will institute inquiries, and give us (mine adventurers) the benefit of them. As to Mr. Michael Williams he is beneath my notice, for his conduct is reprehended by all who know him. The object I desire to see achieved is the usefulness of the Miners' Company; that cannot be demonstrated without the support of the miner and mine adventurer—let them, then, not be supine or inactive, but at once show their independence, by supporting a concern which I believe, in its origin, was established with a good motive, and which can only be carried on advantageously by a strict adherence to principle.

London, July 8. A MINE ADVENTURER.

[The importance we have ever attached to the establishment and working of the Miners' Company, leads us to make some observations on the letters of our correspondents, inserted in this day's Journal, in another column. We can assure "A Mine Adventurer" that we have no wish to prejudice the company, but, as chroniclers of passing events, we must be expected to express our opinions on the past, present, and future—noting the changes which take place, and endeavouring, so far as is in our power, not only to justify past observations, whether laudatory or otherwise, but to support our present views, and hold out, if not a guide, at least the *matériel*, from which one may be framed for the future.]

MINING SPECULATIONS—CAUSE OF FAILURE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—From the numerous failures in mining speculations, where large capitals have been subscribed by public companies, one is almost led to believe that a large capital is an evil. I do not now refer to those fraudulent schemes, got up for the purpose of deception, in order to enable swindlers to rob their dupes—against these, persons of ordinary intelligence and caution may be on their guard. It is when all is fair, honest, and above-board, and the best intentions existing amongst the projectors and managers, which renders their want of success a source of regret, as a loss to the community, and, as disappointments are more frequent with public companies than in private enterprise, there must be something radically wrong somewhere, either in the constitution of those companies, or in the system adopted for carrying the views of the proprietors into effect—the profitable working of mines. To be able to solve the question fully, as to where the fault lies, I do not pretend. I must, however, say, that I am not convinced the error lies in having the command of a large capital, although a friend of mine argues that such is a positive evil to men who desire to succeed in any trade or business, as the greatest number of persons who have been successful in business commenced the world with nothing. However this may be, I would beg to observe, that public bodies entering on business, unlike individuals, are too often unwilling to "creep" until they are able to walk; they wish to be thought to have arrived at the years of discretion, whilst they are yet in their pupilage. The day of small things they despise—youth is their aversion. Large and costly establishments are got up, and high salaries paid out of all proportion with the subject on which they commence operations, particularly in its infant, or untried state, where years may be required to prove the extent of establishment it will be able to support. I most certainly would be inclined to advocate paying men liberally out of the fruits of their labour, but it ought to be borne in mind that such liberality can only, with prudence and justice, be indulged in, or paid, by giving an adequate portion of the produce for labour, as a remuneration for valuable services, and not, as is too often done, out of the capital subscribed, to render such labour and services available. The system I allude to, and would humbly beg to advocate, I know has been ridiculed as the "screw system," and that men of acknowledged talent and experience will not give their time and skill on these conditions. Well, if not, let young men of character, but who have no pretensions, be employed, and, if judiciously selected, my opinion is, those are the best. In the opening and management of mines, it is as absolutely necessary to possess a knowledge of economical science as of mechanical science; by neglecting the former, many mines have been abandoned, or worked with loss, after making large outlay on the latter, which otherwise might have been worked with profit, and to the advantage of all concerned. Anything approaching to extravagance in one department is sure to lead to similar waste in other departments, and in that case, unless particularly fortunate in "cutting her rich," curtailing the cost after the mine is "drowned in debt" is the only resource, but which would have been more profitable, as well as pleasant, to have effected before it had arrived at this stage. It is admitted that, for men to be eminently successful in any profession, trade, or calling, it is for a time, in most cases, with them, one continued struggle as "between life and death;" therefore, it is out of the nature of things to expect public companies, who only think of providing situations for friends—in many cases men past their labour, or, which is equally as bad, unaccustomed to labour—can have the same chance of success as working men. Certain it is, that, whatever the cause may be, mining speculations do not become profitable with public companies, in many cases where the "fault" is not in the mines, as many concerns that could be named would fully testify. A WORKMAN.

FOREIGN MINES—RATE OF WAGES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have only just seen your paper of the 20th March, which states that Mr. Alderman Thompson has sent out thirty miners to Cuba at 6*l.* per month. I don't know whether they be Cornish miners or not, but, if so, it is 2*l.* or 3*l.* a-month less than what I ever knew; and if such be the case, then good-bye to poor Cornwall, for if they can make such profits before what can they do now? I once worked at the Cobre mines, but they were richer then; I had more than twice 6*l.* a-month. Now I've got back, Cuba never sees me any more. A WORKING MINER.

Camborne, June 30.

TALACRE COAL AND IRON COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—There are some particulars respecting the affairs of the Talacre Company, upon which I and others of the unfortunate shareholders would be thankful to receive some information, through the medium of your columns, and, perhaps, either yourself, or some of your occasional correspondents, will oblige us by answering the following inquiries:—Is it true that the books of the Dublin directors exhibit a defalcation on the part of that honourable board, and its worthy secretary, W. Clouston, to the amount of 3500*l.*?—Is it true that W. Clouston, the secretary, admits that his accounts are deficient by several hundreds of pounds, and this deficiency arising from personal delinquency?—That the accounts of the manager, Mr. Sears, likewise show him to be a defaulter to a large amount?—And that the London secretary, W. Weston, used the money of the company to pay the debts of the St. George's Harbour Company, in which his father, and most, or all, of the old directors were interested? If these assertions, which have been publicly made, and, I believe, printed, are true, I wish to know, Mr. Editor, why these delinquents cannot be punished, and made to refund the sums thus iniquitously obtained? I can understand why the directors, Hodges, Hyndman, or Clouston, sen., being partners, have unlimited power to plunder the shareholders and debenture holders with impunity, and, perchance, use the funds thus disgracefully acquired, to crush, to utterly ruin, those who have had the honesty and the fearlessness to expose their bad faith. I can understand the secret links which bind these men and Alderman T. Wood together, notwithstanding they have more than once or twice denounced each other as unprincipled adventurers, and, consequently, all unite to prevent a discovery that must be fatal to them; but why, I would ask, are the servants of the company to be allowed to pocket their sinister gains, not only without prosecution, but without reproach, and, not only so, but it appears that those dishonest claimants, who are unjustly suing honest proprietors for amounts never earned, for debts never incurred, are countenanced by the fellowship of the London Alderman and others. If the sums thus abstracted, or unaccounted for, were made good, they would, I am assured, in a great measure, relieve the suffering portion of the shareholders from the pressure of those debts that have been contracted with tradesmen and shopkeepers, and who seem to have been induced to attack only those who, in fairness and probity, were least liable.

Nottingham, July 6. INQUISITOR.

[We have much to say on this company, but are collating evidence, and shall be glad for any hints from "Inquisitor" ere we return to the "operations" of the concoctors of the company and its worthy directors and officers.]

MINING IN IRELAND.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have no knowledge of who Mr. St. Pierre Foley may be, or what are his acquirements or ability, but I cannot do otherwise than admire the course he has taken of drawing attention to "Mining in Ireland," because, in giving publicity to his discoveries and the results of his labours, he at once sets an example to others engaged, like himself, in mineral surveys, whereby we shall know more of our resources; whereas, if he is wrong, I will warrant that he will be soon set right. It would be a great benefit to this unfortunate country if that the companies would give you a report now and again, and communicate their ideas with one and another, but more especially to state the particulars concerning all new discoveries; but I fear, and I am sorry to say it, that there is a sort of jealous feeling with us, which ought to be got rid of, if only for the benefit of the country at large. I am sorry to see that you say nothing about Irish sulphur of late; and, indeed, the accounts from Wicklow are not the most encouraging. If we had only the money, we would show you what we could do, but, unfortunately, we have the want of it.

Dundrum, near Dublin, July 6. PAT. BYRNE.

WIRE ROPE FOR SHIPPING, MINING, AND RAILWAY PURPOSES.

We understand that a successful trial of the properties of the wire rope was made, a short time since, in her Majesty's dockyard at Portsmouth, undertaken (by permission of the Hon. D. P. Bouverie, admiral superintendent) with the view of testing its superiority over that of hempen rope for nautical purposes. The following particulars of the test, which was conducted in the presence of many distinguished and scientific persons, have been furnished by a correspondent:—"Three pieces of wire rope were put to the test of the machinery at the rigging-house, and the following was the result:—Two fathoms of hawser-laid wire rope, of 2½ inches circumference, stretched 16 inches, and broke at a strain of 9 tons 3 cwt. 2 qrs. 19 lbs.; was placed again and further tested (having three wires broken), and broke this time at a strain of 9 tons 0 cwt. 2 qrs. 19 lbs. It was spliced again, the ends being only once turned in, and bore a further strain of 7 tons 5 cwt. 3 qrs. 19 lbs. A piece of selvagee wire rope, of 1¼ inch circumference, was next tested and broken at a strain of 3 tons 11 cwt. 2 qrs. 6 lbs., having stretched only three inches. Another piece of selvagee wire rope, measuring only three inches circumference, was afterwards tested, and broke at a strain of 15 tons 12 cwt. 1 qr. 19 lbs. Several pieces of wire rope were afterwards knotted and spliced in various ways, to show that there could be no objection raised on that ground."

The following table has been made by order of the late Admiralty, at the dockyard at Woolwich:—

Breaking strain.	Eql. strength.	In. circum.	Wt. per fm.		Price per fm.	
8 Tons	Wire rope	2 inches	2 lbs.	10 oz.	1s.	6d.
	Hemp do.	5 inches	6	0	2	7½
	Chain	½ inch diam.	16	0	4	0
24 Tons	Wire rope	4 inches	12	4	6	7½
	Hemp do.	10 inches	20	0	10	11½
	Chain	31-32 in. diam.	54	0	11	10½
54 Tons	Wire rope	6 inches	24	0	16	6
	Hemp do.	15 inches	47	0	20	9½
	Chain	1 in. 7-16th d.	115	0	24	0

This table applies only to salvagee rope, intended for ships' standing rigging, which is one-fourth stronger than hawser-laid, the latter being better adapted for railways and mining purposes.

MEMORIAL COLUMN TO THE LATE SIR HUMPHREY DAVY.—It will be in the recollection of our readers, that, during the meeting of the British Association in Plymouth, in August last, a meeting was held there of a number of the members of that association, including many distinguished foreigners and friends of science, Sir Charles Lemon, F.R.S., in the chair, at which it was resolved to erect an edifice worthily commemorative of that distinguished philosopher, the late Sir Humphrey Davy, Bart. A provisional committee was appointed to receive subscriptions, and to report to the subscribers on the site and character of the proposed edifice. Last month another meeting was held at the rooms of the Society of Arts, in the Adelphi, London, and we understand, that it has been proposed to erect a granite column to the memory of the deceased philosopher, at Penzance—that the site for the proposed building, commanding the whole of Mount's Bay, has been generously and gratuitously offered by the owner, the Rev. Canon Rogers—and that there is reason to hope, that the materials, as far as the granite is concerned, will be placed upon equally favourable terms at the disposal of the architect. Should these expectations be realised, and the funds subscribed admit, the building will be adapted for a lighthouse, to be furnished with the most approved apparatus of the present day, having a residence in the basement for the accommodation of a competent person to take charge of such meteorological instruments as may be found most appropriate for the situation, with the combined view of the further advancement of this interesting department of modern science, as well as the more important protection of the adventurous mariner.

ST. ROLLOX CHIMNEY.—This great undertaking was finished on Wednesday, being that day twelve months from the time when the first brick was laid. The chimney, as before stated, rises 430 feet from the ground, and at least 600 feet above the more densely-peopled portions of the city and the bed of the river. In relative height, independent of the elevation of its base, it is little inferior to the loftiest superstructures in the world; in absolute height it towers into the air incomparably higher. The great pyramid Cheops rises 499 feet, but this includes a base of 130. Strasburg Cathedral is 474; St. Peter's in Rome, from ground to pinnacle, 430, being exactly the altitude of the monster chimney; St. Paul's, in London, 370. The base of the chimney underground is forty-six feet in diameter; at the ground, forty; at the top, 13 ft. 6 in. During all the time this prodigious mass of brickwork has been erecting not the slightest accident has occurred, which is very much owing to the extreme caution and attention of the excellent engineer and his able coadjutor, Mr. M'Intyre, the contractor, who have thus raised a monument to their professional reputation the loftiest in the world.—*Glasgow Chronicle.*

PROCEEDINGS OF PUBLIC COMPANIES.

EAST CORNWALL MINING ASSOCIATION.

The annual general meeting of the proprietors of the above company was held on Tuesday, the 5th inst., at the office of the company, 24, Birchin-lane, J. WHITTON, Esq., in the chair.

The advertisement calling the meeting was read; the minutes of the meeting held on the 22d June were read and confirmed; the statement of accounts was read, which showed a balance in hand of 30*l.* 17*s.* 4*d.*, subject to a liability of 190*l.*

The CHAIRMAN stated, that the expenditure had been entirely for working, and the trustees had been obliged to procure from Mr. S. Samuel the sum of 190*l.* by way of loan, the company's funds being quite exhausted.

Mr. H. BARRETT moved, and Mr. EDWARDS seconded, a resolution approving of the accounts submitted, which was carried unanimously.

The CHAIRMAN then explained, that the present meeting was called for the purpose of submitting the accounts of the trustees, and of consulting the shareholders on the affairs of the association, and as to dissolving the same. According to the resolution passed at the last meeting, authorising the trustees and directors to make such arrangements with the parties who had stated that they knew the spot where the lode which would repay their exertions lay, they had spared no trouble, but they had not been able to come to any agreement with those parties, for reasons he could not state, as they would be of a personal nature, but they were thought sufficient, by the whole of the board, to determine the directors to have nothing to do with these parties. Since the last meeting the mines had been worked according to the existing agreements and leases, and the result had been a total exhaustion of the funds of the company, and a necessity of borrowing 190*l.* to pay the costs of working, to ascertain if there was any prospect of success. The prospects as to a favourable result were as bad now as at the last meeting, and their circumstances much worse, for then the association had (at the last meeting) a balance of 260*l.* in hand, and was free from debt, and now they had a liability of 190*l.*, and only 30*l.* in hand. It was utterly impossible to say if the place were wealthy—report said it was, and many were very sanguine still, but one thing was very clear, this company could not find out the mine of wealth that was so confidently, and on oath, stated to lie there, although works had been carried on in every possible direction. He, with the rest of the trustees, thought it would be more to the interest of the proprietors to close the concern; they could go on, but the probability was, that no other result would accrue but a larger liability.

In reply to a proprietor the CHAIRMAN stated, that it was of no use sending anybody to inspect the mine, as it had been repeatedly done already—at least twenty times. The only plan was to let those parties who knew where the rich lodes lay have a chance of buying the setts from the association at a good price, so as to give a return of a portion of the money the proprietors had so fruitlessly expended. The trustees were, equally with the other proprietors, large losers—indeed, they held the greater proportion of the shares.

A PROPRIETOR wished to know if there were no prospects of success?—The CHAIRMAN, in reply, stated, that, since the last meeting, the mines had had a trial for another year, and the company was in a worse situation. If the proprietors wished to pay the remaining 10*s.* per share, still uncalled for, the trustees would promise to spend it as sparingly as possible—but go it would, in his opinion, without some unforeseen accident should occur. It had been sworn that the property was worth at least 40,000*l.* The trustees were quite unanimous as to the measures to be adopted, and, therefore, recommended the proprietors to give up the concern. As for the letters from Cornwall, they might as well be printed, and thus save the trouble of writing them, for one letter stated, we have cut a lode, which looks well, and we hope to give better news in our next; then the next letter says, that, on examination of the lode, it is found to be unproductive. So it had gone on, and if the company were determined to prosecute the undertaking, he should certainly recommend that those two letters be printed, for the story was always the same. The rich lode might be there, but they could not find it; he had no hopes of the success of the business. The whole the present company had realised from the mine was tin, to the amount of 111*l.*, and no copper.

A series of resolutions was then proposed, seconded, and carried unanimously, dissolving the company, and making the necessary provision for the payment of the liabilities, and dividing any balance that might remain in hand.

The thanks of the meeting were then unanimously voted to the trustees and directors for their unrequited services.

The CHAIRMAN, in returning thanks, said, it was a matter of deep regret to the trustees that the speculation had not turned out different, but no expense or trouble had been spared in fully proving the mines. The trustees were the more grateful to the proprietors for the vote of thanks that had just been accorded to them, on account of having been unsuccessful, for such resolutions were generally come to when a large dividend was declared, and not when the dissolution of a company was recommended, in consequence of the total want of success in the undertaking.—The meeting then adjourned.

ROSE DOWN MINING COMPANY.

The general meeting of the proprietors of the above company was held on Tuesday, the 5th inst., at their offices, 44, Finsbury-square.

P. STAINSBY, Esq., in the chair.

The advertisement convening the meeting having been read, the CHAIRMAN stated, that the directors had called the meeting to take the opinion of the shareholders as to the propriety of dissolving the company, as Mr. Johnson's report, which would be read in conjunction with the determination expressed by several of the principal proprietors to withdraw from the undertaking, showed the utter hopelessness, with the present capital, of proceeding further. He (the chairman) then read Mr. Johnson's report as follows:—

As I shall most likely be out of England at the time of the meeting of the shareholders in the Rose Down Mine, I beg to say, that, as far as any interest I hold, I am no longer disposed to carry on the operations. On my last visit I went underground in the mine, and it appears to me that the large hard channel of ground we had in the adit has so destroyed the copper lode, that merely small strings of the lode are perceptible; neither do I think there is any prospect of success, without sinking a shaft under the channel of ground, which would entail the expense of machinery, which neither the state of the finances of the company or the mineral indications justify.

The statement of accounts was then submitted, which showed that there had been expended in mine costs, from November, 1839, to May, 1840, 1870*l.* 12*s.* 8*d.*, and other disbursements, 54*l.* 11*s.* 3*d.*—making a total of 1925*l.* 3*s.* 11*d.* The ores sold had only amounted to 490*l.* 3*s.* 10*d.*, and there was a balance against the company of 68*l.* 15*s.* 9*d.*

It was then unanimously resolved:—

That the accounts and report read be adopted and entered upon the minutes.

That this company be dissolved.

That the directors be authorised to dispose of the setts and leases belonging to the company by public auction, or by private sale, as they may deem expedient.

That the directors be authorised to dispose of the materials and machinery belonging to the company also by public auction, or private contract, and to settle the outstanding Rose Down claims, and to divide the balance amongst the shareholders who have paid the calls.

The thanks of the meeting were then voted to the chairman, and the meeting adjourned.

QUEEN'S MINING COMPANY.

A general meeting of the proprietors of the above company was held at the office, 44, Finsbury-square, on Tuesday, the 5th inst.

P. STAINSBY, Esq., in the chair.

The advertisement convening the meeting having been read, the statement of accounts was submitted, which showed that the expenditure, since the last meeting, had been 704*l.* 1*s.* 11*d.*, and the receipts 860*l.* 6*s.* 6*d.*—leaving a balance in hand of 156*l.* 4*s.* 7*d.* The amount of ore sold, included in the receipts, had amounted to 173*l.* 16*s.* 6*d.*

The following letter (addressed to the chairman), was then read:—

SIR,—As I shall most likely not be in England at the meeting of shareholders of Queen's Mines, I hereby give you authority to vote on my behalf for the winding up and division of residue of that undertaking. I cannot but regret that so much money should have been expended without completing the object for which we commenced operations, but as we could not return the work without encumbering expenses, I think, under all the circumstances, it may be best to dissolve the company. P. N. JOHNSON.

The CHAIRMAN stated, that the opinion of the directors was the most advisable course, under existing circumstances, for the proprietors to pursue, would be to abandon the undertaking and dissolve the company, and the present meeting had been called to take the opinion of the shareholders on the subject.—[The resolutions agreed to are the same as in Rose Down meeting.]

Thanks were voted to the chairman, and the meeting separated.

RIO DE ANORI GOLD STREAM WORKS COMPANY.

A special general meeting of shareholders in this undertaking was held, pursuant to advertisement, at the George and Vulture Tavern, Cornhill, on Monday, the 4th inst. Proprietors holding to the extent of 600 shares were present. E. C. UNDERWOOD, Esq., in the chair.

The advertisement convening the meeting having been read, Mr. HARPER (the secretary) read the minutes of the last meeting, held on the 2d February, 1841, which were confirmed.

A lengthened conversation ensued on the call of 10*s.* per share, made on condition that, in the event of it not being responded to in such manner as to enable the directors to carry out the intentions of the company, the amount should be returned to the respective parties—it appearing that 30*l.* only had been paid, such sum was ordered to be refunded. The subject of remuneration to Mr. Harper for his services as secretary was then discussed, from which it appeared that Mr. Harper had, for nearly four years, rendered his services gratuitously, besides affording accommodation for the meetings of directors, and kept the books and accounts; the decision of the meeting was, that thirty guineas be presented to Mr. Harper for his labours during that period, or 13*s.* 1½*d.* per month.

A despatch from Captain Von Orloff, as agent in the province, was read

whose opinion was, that the property was "most valuable;" that the persons hitherto employed as agent and superintendent had not only not done their duty, but had considerably robbed the company; that the operations carried on had not the slightest chance of making a return, but the tract to which attention should be directed was still *untouched*; this was the bed of the river, where, by clearing off the alluvial soil to the depth of about twelve feet (and thereby diverting the course of the stream) to the primitive formation, or shelf, he had *no doubt* a rich harvest of gold would be obtained; he estimated the cost of this work at about 240*l.* per month, previous to getting the works into regular and steady operation, but considered this *might* be nearly covered by gold obtained from the alluvium; and on getting the works into steady operation, he was willing to undertake the superintendence at 6*l.* per cent. on the *produce*, without any other emolument.

It was now considered what steps would be most advisable under the circumstances.—Hr. HART thought the wisest plan would be to make an offer to M. Von Grieff, or some other party, to work the property on their own account at a rental to the company.—Messrs. DEACON and TOTTIE, jun., had so good an opinion of the property, they were willing to pay another call on their shares if there was a probability of the other shareholders paying, so as to carry out the thing with spirit.—Mr. HELPS suggested the issuing new shares, giving the option to the present shareholders, or for those gentlemen who were willing to go on, endeavouring to purchase for the company the shares of those parties who objected to pay further calls; but, after much discussion, it was generally considered that the meeting should adjourn, to give an opportunity for a larger number of shareholders to be present; and, on the motion of Mr. TOTTIE, jun., seconded by Mr. PERRY, it was resolved to adjourn to Monday, the 19th inst., at one o'clock, and that in the interim all shareholders could inspect the dispatch and other documents at Mr. Harper's office, Cloak-lane.—Thanks were voted to the chairman, and the meeting separated.

ANGLO-MEXICAN MINING ASSOCIATION.

The general meeting of the proprietors of the above company was held on Wednesday, the 6th inst., at their offices, 9, New Broad-street, but our reporter having been refused admittance, we are unable to give an account of the proceedings.—We expect next to meet with a refusal to allow the correspondence to be copied.

COLONIAL JOINT-STOCK BANK.

At the half-yearly general meeting of the shareholders of the above bank, held at the London Tavern, Bishopsgate-street, on Tuesday, the 5th instant, the directors' report showed that the balance of profit in hand, on the 31st December, amounting to 15,104*l.*, after deducting 1000*l.* for preliminary expenses, would enable the directors to declare a dividend of 2½ per cent., besides leaving 1604*l.* to be carried to the bad debt account. The reserve fund still amounts to 24,147*l.* The directors admit that they did not calculate upon as prosperous a business as in preceding years, from the depressed condition of the energies of the colonists, but they nevertheless were not, they say, prepared for the great decrease in profits which the statement laid before the meeting showed. It was remarked, that possibly they could have increased the profits, had they allowed the utmost accommodation which the mooted interest required; but thinking that things were not in a sufficiently sound state to warrant this course, they had adopted the precaution of advising the managers at the different branches to circumscribe within certain limits such accommodation to all classes, and thus relieve the establishment of any unnecessary responsibility. This course of conduct had so far answered their expectations, that, although it had in the one case very much decreased the amount of bonus to be divided among the proprietors, it had in the other saved them from contracting a variety of bad debts, above those which were already incurred by their ordinary transactions. In the financial statement exhibited to the meeting, the circulation is set forth as 139,675*l.* 4s. 2d., the deposits, &c., 1,033,437*l.* 13s. 7d., and the paid-up capital as 500,000*l.* The specie held by the bank is stated at 473,242*l.* 10s. 2d., and "other assets" at 1,230,683*l.* 14s. 4d. Some objection was taken by one or two of the shareholders to the inexplicable state of the accounts, which, it must be supposed, alluded to the indefinite item called "other assets," and there was an evident desire that the accounts should be left open for inspection a fortnight at least before a meeting was convened, in order that any proprietors might be prepared to ask for explanation concerning them. In the present system of public meetings, it was remarked there was no opportunity of entering fully into discussion, as the shareholders, without there was some palpable fraud or public charge of mismanagement, were unable to get at anything like detailed facts connected with such undertakings. —In answer to a question relative to the state of the bad debt account, the CHAIRMAN said, it was impossible, in the minute sense of the word, to arrive at the real amount, as persons who were acquainted with the nature of the business of a bank must be well aware that securities were held which must "run off" before the fact could be ascertained.—There was no opposition to the declaration of a dividend, which was naturally enough carried unanimously, and, after some further conversation, of no particular interest, the meeting separated.

GLOUCESTER AND BERKELEY CANAL.

A special meeting of the proprietors of this canal was held at Gloucester, on Thursday, the 31st ult., to consider the propriety of rescinding or reconsidering the increased rates of tonnage agreed upon at the meeting held on the 6th of April. Upwards of sixty proprietors attended. Mr. S. Baker, in a speech of considerable length, suggested various modifications in the proposed rates. A long discussion followed, and ultimately Mr. Baker proposed a resolution for the appointment of a committee to examine into the question in all its bearings. The object of Mr. Baker, and of the gentlemen who supported his views, was not to entirely defeat the object of the shareholders, but to obtain a judicious scale of dues which would be likely to increase the revenue of the port, without operating disastrously on its interests; the merchants being ready to submit to an alteration, but not such an alteration as that proposed. After a long and desultory discussion, a show of hands was taken, when the amendment was declared to be negatived. A poll afterwards took place, when the original resolution was confirmed by a large majority. The increase in the rates first resolved on, will, therefore, take place immediately.

LIVERPOOL AND MANCHESTER RAILWAY.

"A late meeting of the proprietors of this railway having authorised an application to Parliament for an Act to enable them to make a junction between the Liverpool and Manchester Railway, and the Leeds and Manchester Railway, at Hunt's Bank, Manchester, a special general meeting of the proprietors was held on Tuesday last, at the Cotton Sales-room, Liverpool, in order that the several provisions of the Act might be submitted by the directors. A brief outline of the bill was read by Mr Clay; it merely sought for power to make the junction, to buy certain pieces of land and erections, and prescribed the manner in which certain parts of the works should be finished. It was then proposed by Mr. ROTHERHAM, and seconded by Mr. VAN ZELLER—"That this bill is approved of, and the directors are empowered to proceed with the same, subject to such alterations and additions thereto as in the course of the proceedings the directors may deem necessary or expedient, or Parliament may require."—This resolution was carried unanimously, and thanks being voted to the chairman, the meeting separated.

BRISTOL AND EXETER RAILWAY.—Friday week was the day appointed for the opening of that portion of the line of the Bristol and Exeter Railway which connects the towns of Bridgewater and Taunton. A considerable number of the shareholders availed themselves of the invitation politely given by the directors to meet them in the latter town to celebrate the event by a public breakfast. The first train for the conveyance of passengers to Taunton was announced to leave the terminus at Temple Meads, Bristol, at nine a.m., but in consequence of the influx of visitors additional carriages had to be attached, which caused some delay. The journey from Bridgewater (11¼ miles) occupied twenty minutes only, and the very perfect and complete state of the line was a subject of general remark. The station and offices, too, came in for a large share of commendation, the buildings being mostly completed, and, without ostentatious display, presenting a very neat, if not beautiful, architectural appearance. Immediately adjoining the station is the railway hotel, which, with the other buildings, has sprung up like magic. By this extension of the railway to Taunton, Exeter, Plymouth, and other western towns, will gain there an hour additional for their correspondence with Bristol. The journey from Bristol to Exeter will now be accomplished in about five hours.

THE LIVERPOOL AND GLASGOW STEAM-SHIP "ADMIRAL."—This favourite vessel arrived here on Friday, after a remarkably short passage from Greenock. It is with pleasure we observe her resume her place between Liverpool and Glasgow, for, without disparagement to others, the *Admiral* is, to our taste, as fine a first-class steamer as is to be met with in this country; she is of the same class and description as the *Achilles*, and, from what we can learn, is of greater length of keel than the famed Boston and Halifax steam-ships. Although the speed, elegance, and comfort of the *Admiral* are so well known to travellers, we recommend every person who can appreciate a fine steam-ship to go view the *Admiral*.—*Liverpool Albion.*

TURNPIKE ROADS.—In 1818 there existed in England and Wales paved streets and turnpike-roads to the extent of 19,720 miles, and other public highways 95,144—making altogether 114,829 miles. From the report of the lords of the committee upon turnpike trusts, it appears that in the year 1829 the extent of turnpike-roads in England was 18,274 miles; Wales, 2031 miles; Scotland, 836 miles—making a total of 21,141 miles.

MINING STATISTICS.

LISBURNE MINES.

These mines are in Cardiganshire, in the neighbourhood of Aberystwith, at which port the ores are shipped. The number of shares into which the undertaking is divided is 100. The mines, are of considerable extent and promise, but we are sorry to find have, for the past twelve months, worked to a loss of 3246*l.*—attributable, in a great measure, to the heavy expenses attendant on the erection of machinery, more especially at Fron-goch, and in the buildings, pitwork, and other works connected therewith. Although the working has been attended with a loss, arising (as already mentioned) from expenses attendant on purchase and erection of machinery, as well as other surface-work, it is gratifying to find that the underground operations are of a favourable character, and fully justify the expectations entertained, more particularly the discoveries made at Log-y-las east mine—Fron-goch is also promising. At Log-y-las east mine, the seventy-four fathom level west of Worsley's shaft has yielded on an average 2½ tons per fathom; the eastern end had been stopped. Worsley's shaft, which was then sinking below the seventy-four, being at a depth of 87½ fathoms, it was intended to drive out on reaching the depth of ninety fathoms. The deep adit west had produced two tons per fathom, but had not been extended more than twenty fathoms in the twelve months. Eddy's shaft had been sunk nine fathoms under adit. At Log-y-las west mine the workings had been suspended until the adit should be brought in. The large water-wheel at this mine it was proposed to move to the dressing floors, and attach it to a large stamping-mill, so as to make returns from the halvans, which are on the increase. It is expected that twenty-six stampheads will be put to work in the course of the present month. The returns from Logy-y-las had been lately 100 tons per month, but an increase of thirty tons per month were shortly contemplated, with every prospect of such increase being lasting. At Fron-goch, Pryse's shaft had been sunk to the forty-four fathom level, having passed through a good bunch of ore at the thirty-four; the shaft being sunk perpendicular had left the lode to the south. A length of forty fathoms of good ore ground had been passed over by the thirty-four fathom level west, and returns were confidently calculated upon. At Graig-goch the middle level had been driven 123 fathoms, in the course of which about twenty-five fathoms of ores ground were passed through. The deep adit is driven ninety fathoms. At Glogfawr the end of the deep adit is forty-one fathoms from the mouth. Mr. Taylor, in closing his report on this mine, says—"I do anticipate a steady profit from it from the middle of this year for several years to come." From the accounts we find that the quantity of lead ores raised and sold was 1153 tons 2 cwt., yielding 12,221*l.* 12s. 5d., from which deduct lords' dues 1137*l.* 0s. 10d., leaves net produce 11,084*l.* 11s. 7d., the costs for the twelve months being 14,331*l.* 4s. 9d.—thus showing a loss of 3,246*l.* 13s. 2d. The expenditure is thus divided:—Agents' salaries, 661*l.* 2s.; tutwork bargains, 4754*l.* 18s. 8d.; surface bargains, 1123*l.* 7s.; carpenters, masons, &c., 808*l.* 7s. 4d.; carriage and horse hire, 1181*l.* 2s. 1d.; materials, 3461*l.* 19s. 1d.; expenses on ores, 912*l.* 7s. 4d; tributers' payments, 500*l.* 5s. 7d.; sundries, 1039*l.* 9s. 11d.—making a total of 14,735*l.* 16s.; from which is to be deducted 401*l.* 11s. 3d., being receipts, leaves 14,331*l.* 4s. 9d., or a loss of 3246*l.* 13s. 2d. The cash account shows a balance in favour of the adventurers on the accounts rendered for the year 1840, of 1388*l.* 4s. 2d., which being deducted from the loss for the past twelve months, leaves 1858*l.* 9s. to the debit of the adventurers.

TREVARNO MINE.

This mine is situate in the parish of Sithney, in Cornwall, and is divided into 128 shares. It is held on lease for twenty-one years, from February, 1840, at a royalty of one-fifteenth. The mine was worked fifty years ago, when two shafts were sunk of the respective depths of twenty and twenty-six fathoms under adit, nearly the whole of the lode between the two shafts having been taken away, and hence the conclusion that the lode was productive. A steam-engine, of 40-inch cylinder, has been erected on the western shaft, and flat rods carried to the eastern, or flat-rod, shaft for drawing the water. Both shafts are now sunk to the depth of forty fathoms. A thirty fathom level has been driven about 100 fathoms in length, east of the flat-rod shaft and west of engine-shaft, the lode varying in size from a few inches to six feet, with occasionally small bunches of tin and copper. The forty fathom level has been lately commenced. The results hitherto have certainly not justified the sanguine expectations entertained on the mine being set on, the lode having been proved 100 fathoms on its course, at a depth of ten fathoms below the old workings; it is, however, satisfactory to find that, at the forty fathom level, five fathoms east of the shaft, the lode has improved, and was producing two to three tons per fathom. There are three other lodes within the distance of about fifty fathoms south. The value of copper and tin raised in the twelve months amounted to 349*l.* 14s., from which deduct one-fifteenth lord's dues, leaves 336*l.* 11s. 9d., the costs being 2150*l.* 3s. 8d.—thus showing a loss of 1183*l.* 19s. 9d. to this is to be added 3379*l.* 11s. 1d.—making a total expenditure of 5193*l.* 3s. 7d. The amount is not very heavy, and the improved state of the lode at the lower levels will, it is to be hoped, lead to discoveries which will repay the adventurers for their outlay.

GOGERDDAN MINE.

This mine is situate in Cardiganshire, and is divided into 100 shares. The result of the working of the mine, as shown by the accounts for the year 1841, is, we regret to say, not of a cheering nature, while the report of the manager is also desponding. There are two mines or distinct workings—viz., the Cwmsyniog Mine and the Darren Mine. It is hardly necessary to enter into any detail of the workings, as they possess but little interest as regards future prospects. The quantity of ore raised in the twelve months was 232 tons 14 cwt., producing 3373*l.* 19s. 8d., from which deducting 302*l.* 9s. 11d. lord's dues, the net produce was 3071*l.* 9s. 9d., the costs for the like period being 6966*l.* 6s. 7d.—thus causing a deficiency or loss of 3896*l.* 16s. 10d. The expenditure is as follows:—Agents' salaries, 453*l.* 13s. 4d.; tutwork bargains, 2466*l.* 4s. 7d.; surface, 418*l.* 15s. 6d.; carpenters, masons, &c., 454*l.* 0s. 9d.; carriage and horse hire, 716*l.* 7s. 11d.; materials, 1705*l.* 16s. 9d.; expenses on ore, 576*l.* 8s.; sundries, 181*l.* 19s. 4d., or gross amount, 6966*l.* 6s. 7d.; the cash balance shows a deficit of 936*l.* 0s. 5d.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

July 4.—I beg leave to inform you that the lode in the 110 fathom level west is still about eight inches wide, and producing stones of ore; in the winze sinking below this level but little of the lode has yet been taken down. In the 100 fathom level west the lode is six inches wide, with a small proportion of ore; in this level, east of Wall's shaft, we are still driving south; the lode in the eastern stopes, in the back of this level, is eighteen inches wide, and worth 30*l.* per fathom; the lode in the western stopes, in the back of ditto, is two feet wide, and worth 44*l.* per fathom. The lode in the ninety fathom level west is six inches wide, with good stones of ore; the lode in the eastern stopes, in the back of this level, is eighteen inches wide, and worth 34*l.* per fathom; the lode in the western stopes, in back of ditto, is twenty inches wide, and worth 33*l.* per fathom; in consequence of an increase of water in the ninety fathom level, east of Hitchins's shaft, we are obliged to suspend driving. The lode in the eighty fathom level east is twenty inches wide, composed of mundic, spar, and capel; the lode in the stopes, in the back of this level, is fifteen inches wide, and worth 25*l.* per fathom. The cross cut south of the Flapjack lode, at the 100 fathom level, is in hard ground. The lode in the sixty-two fathom level east is still small and unproductive. The tribute pitches, upon the whole, are still looking favourable. We weighed on Friday last May ores, 205 tons 15 cwt., and sampled June ores, computed 193 tons.

F. PHILLIPS.

TREGOLLAN MINING COMPANY.

July 4.—The lode, in extending the forty fathom level east, is again assuming a more kindly appearance, and producing a small quantity of ore; the south lode going east, at this level, is one foot wide, unproductive; the lode in the winze, below ditto, is still producing grey ore, which we have set to be sunk on tribute, only at 6*d.* in the 1*l.* The pitches, on the whole, are somewhat improved since my last. Baker's shaft is sunk 9 fms. 3 ft. below the forty; in cutting into the lode, at that depth, it is found to contain some good yellow ore. We sampled to-day (computed) fifty-five tons of ore.

JAMES NICHOLS.

UNITED HILLS MINING COMPANY.

July 2.—Williams's Engine-shaft, sinking—Lode three feet wide, producing some good ore on the north part. Sixty Fathom Level, east of Williams's Shaft—Lode three feet wide, one foot ore of fair quality; west of ditto, lode five feet wide, producing some ore, with a promising appearance. Fifty Fathom Level, east of Eastern Shaft—Lode two and a half feet wide, eighteen inches ore of average quality; west of Diagonal shaft, lode four feet wide, ores throughout, but coarse in quality; east of James's shaft, lode three and a half feet wide, with good branches of ore. Thirty Fathom Level, west of Nettle's Winze—Lode three and a half feet wide, producing but little ore. Diagonal Shaft, sinking under Fifty Fathom Level—Lode three and a half feet wide, producing a small quantity of good ore; eastern shaft, sinking under ditto, lode three feet wide, eighteen inches on the north part ore. Forty-six Fathom Level, east of Turton's—Lode two and a half feet wide, six inches good for ore. Forty Fathom Level, east of Eastern Shaft—Lode three feet wide, producing some good stones of ore, and much improved since last week. Thirty Fathom Level, east of Eastern Shaft—Lode small, and producing but little ore; winze sinking under ditto, lode two and a half feet wide, producing stone ore, but of low quality. Winze sinking under Twenty Fathom Level—Lode two feet wide, unproductive as ground.

N. LANDERS.

CORNUBIAN MINING COMPANY.

July 4.—The engine-shaft is sunk 7 fms. 2 ft. below the sixty fathom level; we expect to complete it to the seventy about the end of this month. In the sixty fathom level west we find the lode to be two and a half feet wide; I refer you to the last report as to the extension, and the estimated distance to meet with lead ground. We have passed through the south lode, in driving the cross-cut south, at the fifty fathom level; it is about one foot wide, composed of fluccan, spar, &c. The twenty-four fathom level, or Clifford's, is still unproductive, but in a soft strata of ground. We are getting on rapidly in rising from the sixteen fathom level, under Stainsby's shaft; we find the ground to be much improved in sinking the same from surface. The ground in Murray's shaft continues hard; we have set seven fathoms, steest or hole, to the forty fathom level. The adit level south is very favourable, but have not intersected any lode as yet; I refer you to the setting-report as to the prices, &c.

J. WEBB.

TRETOIL MINING COMPANY.

July 4.—The lode in the forty fathom level, east of engine-shaft, is small and unproductive. The lode in Williams's shaft, sinking under the thirty fathom level, is small and unproductive. The lode in the thirty fathom level, east of Henwood's shaft, is six inches wide, producing some good ore; this end is improved since our last. The north part of the Mine-park lode, at the twenty fathom level, is fourteen inches wide, producing some good ore. We are engaged at present in cutting down Henwood's shaft below the thirty fathom level, which we hope to be able to accomplish this week. We cannot progress so fast as usual in our adit end, south of Morcom's shaft, the ground being somewhat harder than it usually has been. Friday last being our setting-day, twelve pitches were set, varying in tribute from 3s. 4d. to 72s. in the 1*l.*

H. WILLIAMS. J. MORCOM.

TRELEIGH CONSOLS MINING COMPANY.

July 2.—At the seventy fathom level, west of Christoe, the men are employed rising against the sixty, on the fluccan; at this level east the lode is small, and in disordered ground. At the sixty west the lode is two feet wide, containing some very good ore; this level east is three and a half feet wide, producing some ore. At the fifty west the lode is eighteen inches wide, worth 5*l.* per fathom; and the winze sinking under this level the lode is large, and worth 20*l.* per fathom. In sinking Good Fortune shaft, under the forty-four, the lode is two feet wide, worth 9*l.* per fathom. At the forty-four east the lode is one foot wide, with but little ore. The thirty-four east is worth 8*l.* per fathom. The pitches generally are looking well, some of them have much improved since survey-day.

W. SYMONS.

WEST WHEAL JEWEL MINING ASSOCIATION.

July 4.—The ground in Buckingham's engine-shaft continues rather hard. The seventy east, on the south branch, is nine inches wide, containing stones of ore. At the seventy east, on Wheal Jewel lode, we have communicated to the winze sinking under the fifty-seven, which continued good down to the back of the level; the lode in the end is worth 30*l.* per fathom. At the fifty-seven east, on Wheal Jewel lode, we are rising in the back, where the lode is worth 8*l.* per fathom. The winze sinking under this level, on the south branch, is worth 6*l.* per fathom.

S. LEAN.

FOREIGN MINES.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Gongo, April 23.—Although the gold account for the last ten days shows the same poor returns from the mine and stamps as they have done for some time past, it affords me pleasure to be able to add, that since they were closed a little improvement has taken place in the appearance and produce of the mine. A box of work has come up from the backs of the fourteen fathom level, between Duval's and Morgan's, broken from a large body of whole ground; there is no gold in sight at the time I am writing, but the vein looks promising. You will observe that the new shaft, intended for a communication from surface to the end of the sixty-two fathom level, has been lost, in consequence of a turn in the rise over the forty-eight fathom level, from meeting with a soft channel of ground; two Englishmen and a black, working there at the time the run took place, fortunately escaped without injury, further than a few slight bruises.

May 3.—The mine has not realised the expectations we had been led to hope for, from the favourable appearance of the vein in the back of the fourteen fathom level; it, however, still looks "kindly," but shows no gold "in sight."

J. K. CRICKETT.

Gold Report.—Produce from April 13 to May 9 (seventeen days), 99 lbs. 11 oz. 14 dwts.—Total from Jan. 1 to May 9, 911 lbs. 11 oz. 11 dwts. 19 grs.

BRAZILIAN COMPANY.

Cata Branca, April 29.—I am not surprised at your disappointment at the late poverty of the lode; nevertheless, I do not see any just reason to abandon all hope of our stone again becoming as rich as it was in 1839 and 1840; indeed, I may say, and I do so with pleasure, that our bottoms again look most kindly, and both yesterday and to-day as rich stones have been brought out as ever came from the mine. I attribute the low produce, for some time past, chiefly to the fact of our having had none of the ground from the Olhos Major and Minor, and which has been from my thinking it right to avail of the extreme narrowing in of those Olhos, to leave an arch of ground standing as a support to the walls. I have in my late letters fully explained to you the different works I intended proceeding with; I am sorry now to state, that, in consequence of both No. 6 end, and that of San Antonio deep adit having become very hard, we are just now making slow work—so much so, that I have decided, as the quickest way to secure a gold return, at once to throw the rods across to the Bahu, and to make a temporary road to cart the ore broken. In June, if all goes well, this will be accomplished, and I think, from the nature of the lode laid open in the Bahu, we may fairly reckon on the ten-head stamps (which I have got from Morro das Almas) giving 6 pound of gold a-day. The lets and kindnesses in the Cata Branca Mine have been dreadful. Last week I fully thought they were at an end, and that the gold return would have reached 25 lbs., but no sooner were we independent in our pumping-power than the gudgeon of the axis of No. 3 stamping-engine broke, and occupied all our smiths and many carpenters four days to put in a new one, so that we shall not have above 14 lbs. or 15 lbs. for the week, which, together with that on hand, in all about 120 lbs., exclusive of duty, will be sent to Rio for shipment on Tuesday next. This is the smallest amount sent for a long time, and I trust henceforward to make up for it.

W. COTESWORTH.

Gold return for two weeks, to 23d April ..... 83 lbs. 7 oz. 19 dwts.

MINING NOTICES.

[Under this head we purpose collecting such paragraphs as may appear in the provincial and other *Journals*, having reference to discoveries and improvements in mining operations at home and abroad. It is hardly necessary to observe, that we must not be considered to admit the correctness of the information conveyed, which, in too many instances, requires cautious investigation—the sanguine anticipations of parties in some instances, and the want of honesty in others, throwing a degree of responsibility on a Journal in giving publicity to reports, which we cannot indeed take upon ourselves.]

CLYDE COAL-FIELDS.—The Wilsontown and Coltness Railway, which is a continuation of the Wishaw and Coltness line, is proceeding vigorously. It is to be completed in eighteen months, and will open up almost valuable tract of mineral country between the Clyde coal-fields in the west, and the blackband ironstone and the Leven coal limestone in the east.—*Stirling Observer.*

LANCASHIRE COLLIERY.—Messrs. Duncan and Co. commenced sending coal down by the Taff Vale Railway on Thursday, from their colliery at Lancarach. These gentlemen have been at considerable expense in opening the colliery. The quality of the coal is equal to any shipped from Cardiff or Newport.—*Merthyr Guardian.*

MINE ACCIDENTS.

Wheal Garland.—Thomas Davey, while at work in Wheal Garland Mine, Gwennap, on Tuesday week, was struck by a large stone of granite, which fell from the back of the adit, and killed him on the spot.

Newbridge.—Last week a poor man, named David Laurence, met his death in a shocking manner. It appears that the deceased went with a lighted candle into a pit after the other workmen had left—the flame coming into contact with explosive gas, or "fire-damp," the poor fellow was killed immediately. His body when brought up appeared like a cinder, so obliterated were all vestiges of humanity.

IRON AND COAL MASTERS' MEETINGS.—The ironmasters' quarterly meetings will be held next week, as follow:—On Tuesday, at Walsall; Wednesday, at Wolverhampton; Thursday, at Birmingham; Friday, at Stourbridge; and on Saturday, at Dudley. The coal and lime masters' quarterly meeting will be held at Stourport, on the 19th inst.

THE NEW TARIFF.—On Monday evening the Earl of Falmouth presented a petition to the House of Lords from Mr. Tredfy, the chairman of the mining deputation from Cornwall appointed to confer with the Government on the subject of the tariff, against that part of it which relates to ores and minerals.

RAILWAYS IN ENGLAND.—The first public railway in England was begun in 1801, and was that insignificant horse track from Croydon to Wandsworth. Others of a similar description gradually followed, but only twenty Acts of Parliament for this purpose were passed in the first twenty years of the present century. In the next ten years, from 1820 to 1830, there were forty-nine railway bills passed. The extent of the English railways in 1836 was estimated at 940 miles, and those in progress and contemplation at that time would raised much beyond that distance when completed.

MONEY MARKET AND CITY NEWS.

CURRENT PRICES OF ENGLISH AND FOREIGN FUNDS.

Consols Money, 91¾	Dutch, 2½ per Cent., 51¾ ⅞
Ditto Account, 91⅞	Ditto, 5 per Cent., 100⅞ 1¼
New 3½ per Cents., 99¾ ⅞	Portuguese, 5 per Cent., 33½ ⅞
Exchequer Bills, 48 50 pm.	Ditto, 3 per Cent., 19¾ 20
Belgian Bonds, 5 per Cent., 102 3	Spanish, Actives, 5 per Cent., 21¾ ⅛
Brazil, 5 per Cent., 64 6	Chili, 6 per Cent., 84 9
Danish, 3 per Cent., 81 2	Colombian, 6 per Cent., 22¾ ¼
Russian, 5 per Cent., 114 ½	Mexican, 5 per Cent., 35¾ 6

REMARKS ON THE OPERATIONS OF THE WEEK.

SATURDAY, JULY 2.—The advanced rates of English securities noticed on Friday continued to-day, and Consols for the Account left off firm at 91¾ ⅞; Bank Stock, 168½ 8¾; and Exchequer Bills, 46s. 47s. pm.—In the foreign house dealings were limited, but prices were, in several instances, favourably influenced by the improved appearance of the English market.—The railway market also, in a slight measure, partook of the general improvement.—Colonial Joint-Stock Bank, 35; Union Bank of Australia, 30; ditto, new shares, 5¾.

MONDAY.—The English funds were firm throughout the day, and Consols closed at a further advance of ⅛ per cent., the last price for the Account being 91⅞ ¾; 3 per Cents. Reduced, 91⅞ 92; Bank Stock, 166 7; Exchequer Bills, upon which 2d. per diem interest is paid, 41s. 48s. pm.; and those upon which 2¼d. is paid, 46s. 48s. pm.—In foreign stocks nothing particularly worthy of remark has occurred; there was more steadiness in prices, but this was the result of the better condition of the Government securities, which at all times has some influence on this market. Spanish Actives closed 21¾ ⅞; Portuguese 5 per Cents., 34 ½ ex div.; Dutch 5 per Cents., 101 ½; Colombian, 22¾ ¾; Brazilian, 64 6; Mexican, 36 ½; and Belgian, 102 3.—In railway shares, Birmingham and Gloucesters were marked 49; Bristol and Exeter, 42; Eastern Counties, 8¾; ditto, new, 6l. 6s. 6d. to 6l. 1s. 6d.; Edinburgh and Glasgow, 45 4½; ditto, new, 3¼ ¾ ½; London and Brighton, 34¾; London and Birmingham ¼ shares, 46 ½; ditto, 3ds, 30¾; London and South-Western, 60½ ¾ ⅞; Great North of England, 70 ½; Great Western, 86 7; ditto, new, 61½; Manchester and Leeds, 75½; Midland Counties, 70; ditto, ¼ shares, 17½; North Midland, 60 59½; ditto, new, 10½; South Eastern and Dover, 23½ ¾ ⅞; ditto, scrip, 4 ¾ 5¼ 5.—In joint-stock bank shares, Colonial were quoted, 35 ½; and Provincial of Ireland, 4l.

TUESDAY.—The English stock market continued firm, and fully maintained their improved quotations.—The foreign house and the railway market were without alteration from last rates.—Cobre Copper Mining Company, 35.—Provincial Bank of Ireland, 45.—Australian Agricultural, 30.

There was a moderate amount of business doing in the foreign exchanges. The rate upon Amsterdam remained the same as at last post. Paris was a trifle higher; and Hamburgh, owing to the continued demand for bills on that place, was again lower.

The premium on gold at Paris is 19 per mille, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 25 46½, and the exchange at Paris on London at short being 25 47½, it follows that gold is 0·20 per cent. dearer in London than in Paris.

By advices from Hamburgh the price of gold is 436½ per mark, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 13·7¾, and the exchange at Hamburgh on London at short being 13·9, it follows that gold is 0·50 per cent. dearer in London than in Hamburgh.

The course of exchange at New York on London is 107¾ per cent., and the par of exchange between England and America being 109 23-49 per cent., it follows that the exchange is 2·37 per cent against England. But the quoted exchange at New York being for bills at 60 days' sight, the interest must be deducted from the above difference.

WEDNESDAY.—The quotations of national securities were steady throughout the day, and a purchase of 50,000l. for Money gave considerable firmness to the market.—The foreign stock market was hardly so good in general aspect, though in particular instances no material variation in value occurred.—In railway shares, London and Brighton were quoted 34¾; and Northern and Eastern, 10¾.—Cobre Copper Mining Company, 33½.—Union Bank of Australia, 30.—Metropolitan Patent Wood Paving Company, 4½.

THURSDAY.—The public securities were rather heavy, and a considerable amount of small parcels of money stock being offered, caused a depression in Consols of more than ¼ per cent—the last price for the opening being 91⅞ ½; India Stock, 247 9; Bank Stock, 166 7; and Exchequer Bills, 48s. 50s. pm.—The foreign securities also were heavy, which may be attributed chiefly to the fall in Consols; Spanish Stock was firmer in the morning, with a slight advance in price, but subsequently became heavy, and closed a shade lower.—In the railway share market, Leeds, Manchester, and Brightons were a trifle lower, all others were uninfluenced.—British North American Bank, 31½ ex div.; London and Westminster Bank, 21¼.

The periodical meeting of the directors of the United Mexican Mining Association took place to-day, when it was resolved to make a payment of 30s. per share on the red scrip.

FRIDAY.—In consequence of numerous and repeated sales of stock for immediate transfer, a further decline took place in the prices of English securities; the closing price of Consols was, for Money, 91 ½; and for the opening, 91¾; Bank Stock, 166 7; India St ck, 247 9; and Exchequer Bills, 48s. 50s. pm.—The foreign securities were affected by the decline in the English house, and closed with a heavy appearance.—The share market was without material variation, excepting in Brightons, which again declined, the closing price being 33¾ 4.—London Joint-Stock Bank, 12¾; London and Westminster, 21¾; Union of London, 9¾.—Metropolitan Patent Wood Paving Company, 4½.

In the foreign exchanges, the rates upon Amsterdam and Paris remained the same as last post, but upon Hamburgh were again depressed, owing to the continued demand for bills on that place.

We learn by letters from Altona, that his Majesty the King of Denmark has acceded to the petition of a company to make an iron railway from Altona to Kiel.

NATIONAL DEBT.—The Lords Commissioners of Her Majesty's Treasury having certified to the Commissioners for the Reduction of the National Debt, in pursuance of the act 10th George IV., c. 27, sec. 1, that the actual expenditure of the United Kingdom of Great Britain and Ireland exceeded the actual revenue thereof, for the year ended the 5th day of April, 1842, by the sum of 2,130,384l. 4s. 6d., the Commissioners for the Reduction of the National Debt hereby give notice, that no sum will be applied by them on account of the Sinking Fund, under the provisions of the said act, between the 7th day of July and the 10th day of October, 1842.

National Debt-office, July 6. — S. HIGHAM, Controller-General.

PROMISSORY NOTES AND BULLION.—An account of the average aggregate amount of promissory notes, payable to bearer on demand, which have been in circulation in the United Kingdom, distinguishing those circulated by the Bank of England, by private banks, and by joint stock banks, in England and Wales, by the banks in Scotland, by the Bank of Ireland, and by all other banks in Ireland; and of the average amount of bullion in the Bank of England, during the four weeks ending the 18th day of June, 1842:—ENGLAND: the Bank of England, 17,346,000l.; private banks, 4,995,164l.; joint-stock banks, 2,858,532l.—SCOTLAND: Chartered, private, and joint-stock banks, 2,807,098l.—IRELAND: Bank of Ireland, 3,091,325l.; private and joint-stock banks, 1,789,164l.—Total, 32,848,474l. Bullion in the Bank of England, 7,848,000l. — HENRY L. WICKHAM.

Stamps and Taxes, July 8.

MONTHLY STATEMENT OF LETTERS DELIVERED IN THE UNITED KINGDOM.—Week ending June 18, 1842 3,808,300
Ditto June 19, 1841 3,773,136
Ditto November 24, 1839 1,585,973

Increase since 1841 on the week's letters 35,224
Ditto since 1839 on ditto 2,273,387

[From our own correspondents.]

PARIS, JULY 7.—5 per Cents., 118f. 90c.; 4½ per Cents., 108f. 50c.; 3 per Cents., 79f. 80c.; Bank Actions, 3310f.; Rente de Naples, 108f. 0c.; Romans, 104; Spanish Actives, 22; ditto Passives, 4¾; Belgian, 5 per Cents., 1841, 105¾; ditto 1842, 104¾; ditto 3 per Cents., 104¾, 71f. 40c.; Haytian Loan, 540f. 75c.—Versailles Railway, R. B., 30f.; L. B., 92f. 50c.; Rouen, 517f. 50c.; Orleans, 562f. 50c.; Strasburg to Bâle, 291f. 25c.—Exchange on London, one month, paper, 25f. 60c.; money, 25f. 0c.; three months, paper, 25f. 20c.; money, 25f. 27½.

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Reduced, 91½; 3½ Stock, 99½; ditto New, 101¾, 99¾ to 99½; 4 per Cent. Debentures, 97½; Bank Stock, 175¾.—Kingstown Railway, 80l.; Dublin and Drogheda, 14l.—Hibernian Bank, 27½; Royal Bank, 51¾; Provincial Bank, 40l.—City of Dublin Steam Company, 104½l.; ditto Stock, 160l., 100.—Steam Ship Building Company, 60½l.; British and Irish ditto, 16½l.—National Insurance Company, 26½l.; Patriotic, 7½l.—Mining Company of Ireland, 13½l.; Wicklow Copper Mines, 13l.

EDINBURGH, WEDNESDAY.—Edinburgh and Glasgow Railway, 45l.; Dalkeith and Edinburgh, 30l.; Glasgow and Greenock, 25l.; Glasgow and Garnkirk, 50l.; Glasgow and Ayrshire, 47l.; Wishaw and Coltness, 47l.; Dundee and Arbroath, 30l.; Arbroath and Forfar, 22l.—Bank of Scotland, 164l.; Royal Bank, 134l.; British Linen Company, 238l.; Commercial, 138l.; National, 14l.; Edinburgh and Leith, 13l.; Glasgow Union, 73l.; Western Bank of Scotland, 60l.; City of Glasgow, 8l.—Caledonian Fire and Life Insurance, 2½l.; Hercules Fire, 12½l.; North British Fire and Life, 40l.; Standard Life, 12l.—Edinburgh Gas, 10l.; Edinburgh and Leith Gas, 30l.—Forth and Clyde Canal, 190.

MONTHLY REPORT.—JUNE.—No improvement in the share market can be reported this month. Everything continues dull and inanimate, as can only be looked for in the present depressed condition of our commercial relations. The Edinburgh banks have not yet lowered the rate of interest on deposits, although attempts have been made by some of them to accomplish this desirable object. [illegible]

ROBERT ALLAN.

BIRMINGHAM, TUESDAY.—London and Birmingham Railway, 176l. to 178l.; London and Brighton, 34l. to 35l.; London and South Western, 60l. to 61l.; Great Western, 86l. to 87l.; Birmingham and Derby, 40l. to 41l.; Birmingham and Gloucester, 48l. to 50l.—Birmingham Banking Company, 58l.; Birmingham and Midland, 61½l.; Birmingham and Staffordshire, 7½l. to 7½l.

NEWCASTLE, THURSDAY.—Our share market continues very heavy, and is almost in a state of complete stagnation, without much prospect of amendment.—North of England Joint-Stock Bank, 4½l.; Northumberland and Durham District, 8l.; Newcastle, Shields, and Sunderland Union, 8l.; Newcastle upon-Tyne Joint-Stock, 2½l.; Newcastle Commercial, 9l.; Sunderland, 5½l.; Darlington District, 4l.; Carlisle City and District, 10l.; Carlisle and Cumberland, 6½l.; Stockton and Durham County, 6l.—Newcastle and Carlisle Railway, 96l.; Newcastle and North Shields, 42l.; Brandling Junction, 40l.; Durham and Sunderland, 19l.; Clarence, 19l.; Hartlepool and Stockton, 25l.; Hartlepool Dock and Railway, 100l.; Great North of England, 90l.—Newcastle Union Shipping Company, 3l.; Port of Newcastle, 15l.; London, Newcastle, and South Shields, 5l.; Gateshead and Tyne, 17l.—North and South Shields Steam Ferry, 110l.—Newcastle Subscription Water Company, 30l.—Newcastle and Gateshead Union Gas Company, 7½l.—Durham County Coal Company, 9l.; Northern Coal Mining Company, 6.

BRISTOL, FRIDAY.—We have no symptoms of improvement here, although my quotations for some shares are a shade better than in my last communication. The same complaint prevails in this market as elsewhere, want of buyers, which tends to keep prices almost stationary.—Great Western Railway, 87l. to 88l.; halves, 61½l. to 62l.; fifths, 8½l. to 9½l.; Bristol and Exeter, 42½l. to 43½l.; Birmingham and Gloucester, 48l. to 50l.; Bristol and Gloucester, 11l. to 12l.; Birmingham and Derby, 43l. to 44l.; Cheltenham Union, 25l. to 27l.; Eastern Counties, 6½l. to 9l.; Taff Vale, 68l. to 70l.; London and Brighton, 34½l. to 35l.—Bristol Gas Company, 22l. to 23l.; Clifton, 24l. to 25l.

LIVERPOOL, FRIDAY.—Chester and Birkenhead Railway, 25l.; Eastern Counties, 8¾l.; Grand Junction, 167½l.; Great North of England, 77l.; Lancaster and Preston, 28½l.; Liverpool and Manchester, 175l.; London and Birmingham, 177½l.; London and South-Western, 60½l.; London and Brighton, 35l.; Manchester, Bolton and Bury, 35½l.; Manchester and Birmingham, 22l.; Manchester and Leeds, 76½l.; Midland Counties, 70l.; North Midland, 60l.; North Union, 79l.; Paris and Rouen, 16½l.; South-Eastern, 23¾l.; York and North Midland, 90l.—Borough Bank, 13¾l.; Bank of Liverpool, 18¾l.; Liverpool Banking Company, 8l.; Manchester and Liverpool District, 10l.; North and South Wales, 4½l.; Royal, 63½l.; South Lancashire, 5½l.; Union, 10½l.

SALE OF COPPER ORES IN CORNWALL.

Sampled June 23, and sold at Tyack's Hotel, Camborne, July 7.

Mines.	Tons.	Price.	Purchasers.	Mines.	Tons.	Price.	Purchasers.
Consols	145	£4 12 6	Williams.	S. Roskear	65	£4 19 0	Williams.
ditto	114	4 3 0	Nevill & Co.	ditto	56	1 7 6	P. Grenfells.
ditto	113	5 1 0	—	W. Chance	97	5 3 0	Williams.
ditto	51	4 12 6	Vivians.	Wh. Gerry	56	4 10 0	Vivians.
ditto	51	4 12 6	Williams.	United H.	80	3 19 0	—
ditto	104	4 7 6	Vivians.	ditto	29	4 1 6	—
ditto	99	5 9 6	Williams.	ditto	29	4 1 6	Freemans.
ditto	67	9 18 0	—	ditto	29	4 1 6	Williams.
ditto	64	4 10 0	Vivians.	ditto	51	4 2 6	Vivians.
ditto	60	5 13 6	—	ditto	36	5 3 0	—
ditto	59	7 15 0	Williams.	ditto	26	10 12 0	Freemans.
N. Roskear	112	5 0 6	—	ditto	25	4 5 6	Mines Royal
ditto	99	5 15 0	—	S. Basset	41½	4 18 0	Freemans.
ditto	94	5 13 0	—	ditto	41½	4 18 0	Nevill & Co.
ditto	88	5 13 0	—	ditto	79	4 5 6	Freemans.
ditto	81	5 10 6	—	ditto	65	8 18 6	Williams.
ditto	80	4 4 6	—	ditto	49	6 7 0	Nevill & Co.
ditto	73	5 16 0	—	F. Consols	82½	7 2 0	—
ditto	60	7 2 6	—	ditto	82½	7 2 0	Williams.
ditto	64	1 8 6	Vivians.	ditto	48½	6 7 6	Vivians.
ditto	50	5 18 6	Williams.	ditto	48½	6 7 6	Nevill & Co.
ditto	50	7 5 0	—	ditto	62	6 9 6	Freemans.
ditto	49	6 13 6	—	Fowey C.	166	4 11 6	—
East Crofty	98	4 1 6	Nevill & Co.	ditto	51½	3 18 0	—
ditto	73	5 15 6	Vivians.	ditto	51½	3 18 0	Williams.
ditto	70	6 5 0	Williams.	East Pool	56	5 16 6	Nevill & Co.
ditto	40	0 14 6	—	ditto	55	5 5 0	—
Longclose	72	5 14 0	—	ditto	47	2 18 0	Freemans.
ditto	39	9 2 6	Vivians.	ditto	45	5 3 0	Nevill & Co.
Dolcoath	61	6 5 6	Freemans.	Tretoil	65	4 10 0	—
ditto	29	2 8 0	—	ditto	25½	2 13 0	Vivians.
ditto	29	2 8 0	Williams.	ditto	25½	2 13 0	Freemans.
ditto	55	4 5 6	—	ditto	7	8 10 0	Vivians.
ditto	57	2 9 6	Vivians.	W. Harriet	20	4 5 6	Freemans.
ditto	50	1 8 0	Nevill & Co.	ditto	29	4 5 6	Williams.
ditto	36	5 0 0	Freemans.	ditto	42	4 3 0	Freemans.
S. Roskear	66	3 16 0	Williams.	W. Sparrow	11	3 15 6	Williams.

TOTAL PRODUCE.

	Tons.	Amount.		Tons.	Amount.
Consolidated	974	£4310 13 6	United Hills	290	£1316 10 0
North Roskear	972	4990 14 6	South Wh. Basset	276	1653 14 6
East Wh. Crofty / Longclose	302	2043 14 0	Par Consols	264	1765 6 6
Dolcoath	315	1154 12 6	Fowey Consols	268	882 1 6
South Roskear / Wh. Chance / Wh. Gerry	309	1261 14 6	East Pool	209	972 3 6
			Tretoil	121	480 19 0
			Wh. Harriet	98	413 14 0
			Wh. Sparrow	11	41 10 6

Average standard, 107l. 17s.—Average produce, 7¾.—Average price, 5l. 1s. 6d.—Quantity of ore, 4329 tons.—Quantity of fine copper, 313 tons 9 cwt.—Amount of money, 21,930l. 16s. 0d.—Average standard of last sale, 106l. 9s.—Average produce, 7½.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	25	£108 17 6
Vivian and Sons	814½	3818 11 1
Freeman and Co.	657½	3120 13 4
Grenfell and Sons	56	68 15 0
Sims, Willyams, Neville, Druce, and Co.	782½	3699 14 5
Williams, Foster, and Co.	1990½	10327 0 10
Total	4330	£21,930 16 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Wheal Friendship, 339; Fowey Consols, 256; Levant, 230; Francis's Ore, 162; Wheal Buller, 160; Wheal St. Andrew, 151; Providence Mines, 149; Botallack, 117; Wheal Speed, 116; Wheal Trenwith, 111; Wheal Harmony, 80; Wheal Busy, 75; Harvey's Ore, 70; Tregothnan Consols, 66; Wheal Uny, 50; Rollstian, 17; Gray's Town, 11; Wheal Towan, 9.—Total, 2196 tons.

Copper ores for sale on Thursday week, at Pearce's Hotel, Truro.—Mines and Parcels.—Treasavean, 617; South Caradon, 701; Poldice, 404; Wheal Jewel, 344; Par Consols, 310; Trethellan, 280; Fowey Consols, 242; Holmbush, 131; West Wheal Jewel, 165; Williams's East Downs, 115; Wheal Maiden, 73; Wheal Providence, 73; Tregullan, 53; Great Wheal Fortune, 27; Wheal Damsel, 8; Dennis's Ore, 7; Garnet's Head, 1.—Total, 3553 tons.

QUARTERLY SALE OF COPPER ORES IN CORNWALL.—Copper ores, 33,542 (21 cwts.)—Fine Copper, 2541 tons 8 cwts.—Amount of money, 190,777l. 1s. 6d.—Average standard, 111l. 7s.—Average produce, 7½.—Average price per 21 cwt. 5l. 14s. 6d.—June 35.

SALE OF COPPER ORES AT SWANSEA.

Sampled June 15, and sold on the 6th July.

Mines.	Tons.	Produce.	Standard.	Price.	Mines.	Tons.	Produce.	Standard.	Price.
Cobre	128	12½	101½	9 14 0	Chili	47	13½	90½	15 1 0
ditto	99	12½	98	9 13 0	ditto	9	60½	52½	54 0 0
ditto	99	12½	95	9 17 6	ditto	7	65½	90	52 2 0
ditto	93	12¾	94½	9 16 0	ditto	5	60½	91	63 0 0
ditto	79	12½	94½	9 14 0	ditto	2	63½	93	55 2 0
ditto	111	16¾	97½	11 4 6	Knockmahon	170	11	97½	9 0 6
ditto	79	14½	92½	11 3 6	ditto	69	7½	104	5 6 6
ditto	50	27½	92½	19 3 6	ditto	60	7½	102½	5 5 6
ditto	54	27½	99½	19 1 6	ditto	42	9½	104½	6 7 6
Chili	100	31¾	97½	23 1 0	Bearhaven	131	10	105½	7 15 6
ditto	81	30	89½	20 15 0	ditto	126	10½	99½	6 2 0
ditto	79	40½	84½	32 3 0	Copiapo	74	31½	87½	21 0 6
ditto	27	58½	94½	47 2 0	Prince	60	3½	129½	2 2 6
ditto	12	67½	93½	63 2 0	Lackamore	44	10½	101	6 0 0
ditto	3	69½	81½	60 0 0	Llwydd	97	7½	103	5 4 6
ditto	69	21½	98½	17 0 6	ditto	13	9½	111½	4 0 6
ditto	84	25½	92½	16 16 0	Brass Slag	66	4½	120	3 0 0
ditto	62	22½	90	17 10 0	Cronebane	22	9½	105½	5 0 0
ditto	60	19½	93½	11 4 0	Chili	4	24	80½	19 1 0

TOTAL PRODUCE.

	Tons.	Amount.		Tons.	Amount.
Cobre	747	£8240 3 0	Lackamore	44	£282 0 0
Chili	567	11720 19 0	Llwydd	65	133 0 0
Knockmahon	341	2201 2 6	Brass Slag	66	160 0 0
Bearhaven	257	2609 2 6	Cronebane	22	110 0 0
Copiapo	74	1561 13 0	Chili	4	76 4 0
Prince	60	127 10 0			

Total tons, 2161.—Total amount, £27,303 4 0.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Freeman and Co.	173	£1086 4 5
P. Grenfell and Sons	47	193 0 0
Sims, Willyams, Neville, Druce, and Co.	60	127 10 0
Vivian and Sons	868	13960 3 6
Williams, Foster, and Co.	1032	11436 16 5
Total	2161	£27,303 4 0

Copper ores for sale July 20.—Cobre 119, ditto 98, ditto 94, ditto 90, ditto 103, ditto 80, ditto 71, ditto 93, ditto 37, ditto 9, ditto 66, ditto 34, ditto 62, ditto 142, ditto 67, ditto 53, ditto 78, ditto 73, ditto 53, ditto 37, ditto 64, ditto 62, ditto 29—Santiago 93, ditto 31, ditto 80, ditto 96, ditto 67, ditto 111, ditto 108, ditto 103, ditto 44, ditto 53, ditto 74, ditto 78, ditto 74—Bearhaven 111, ditto 140, ditto 74—Knockmahon 170, ditto 67, ditto 63, ditto 35—Chili 63, ditto 28, ditto 37, ditto 13—Prince 60, ditto 10—Copiapo 100—Laxey 90—Ballygahan 37—Llewydd 70, ditto 12—Ballydian 32, ditto 2—Bay Slag 16, ditto 4—Llanelltwn 98.—Total, [illegible] tons.

SALE OF BLACK TIN,

By Ticket, on the 28th of June, at Truro.

Mines.	Tons.	Price.	Amount.	Purchasers.
North Whl. Towan	1	£43 3 0	£43 3 0	L. C. & W. Daniell
ditto	1	43 3 0	43 3 0	Bolitho and Co.
ditto	1	43 3 0	43 3 0	Williams and Co.

Total tons, 3.—Amount, £129 15 0.

LATEST CURRENT PRICES OF METALS.

LONDON, JULY 8, 1842.

	£ s. d.	£ s. d.		£ s. d.	£ s. d.
SPELTER—Foreign, ton		31 0 0	COPPER—Old .... per lb.		0 0 9
„ For delivery	30 0 0 to	31 0 0	„ Cake p. ton	0 0 0 to	89 0 0
ZINC—English sheet		45 0 0	„ For. cake	0 0 0 to	85 0 0
QUICKSILVER .... per lb.		0 4 0	„ For. tile	83 0 0 to	84 0 0
IRON—English bar, &c. p. ton		5 15 0	TIN—English, blocks, &c. cwt.		3 8 0
„ Nail rods		6 15 0	„ „ bars	0 0 0	3 10 0
„ Hoops	7 15 0	6 0 0	„ Foreign, Banca	0 0 0	3 8 0
„ Sheets	8 15 0	9 0 0	„ „ Straits	0 0 0	3 4 0
„ Cargo in Wales	4 15 0	5 0 0	„ „ Peruvian		—
„ Pig, No. 1, Wales		3 10 0	Tin plates, No. IC. p. box	1 6 0	1 10 0
„ „ No. 1, Clyde		2 17 6	„ „ No. IX.	1 12 6	1 16 0
„ For., Swedish	0 0 0 to	12 0 0	„ wasters 2s. p. box less		—
„ Russian, CCND		16 0 0	LEAD—Sheet milled p. ton		19 10 0
„ „ PSI		15 0 0	„ Shot, patent		22 0 0
„ „ Gourieff		14 0 0	„ Red		24 0 0
„ „ Archangel		14 0 0	„ White		26 0 0
STEEL—Swedish keg p. ton		18 0 0	PIG-LEAD—English		18 10 0
„ Faggot	0 0 0	18 5 0	„ Spanish	0 0 0	17 15 0
COPPER—English sheathing, lb.		0 0 10½	„ American	0 0 0	17 10 0

REMARKS.—The metal market has undergone no variation during the past week.

EXPORTATION OF GOLD AND SILVER.—By the official return published by the Customs, the export of the precious metals from the port of London to foreign and colonial ports, for the week ending Thursday last, was as under:—

Silver coin to Hong Kong .... 219,607 ounces.
„ Rotterdam .... 15,000 „
Silver bars to Hamburgh .... 1,450 „

The quantity of silver coin and bullion shipped at Dover in the month of June amounted to 68,400 ounces.

THE INDIAN METAL MARKETS.

[By the overland mail.]

BOMBAY.—For no description of metals has there been any better demand than before, and the prices of all have to some extent receded. Some kinds of copper have declined from 2 rs. to 3 rs. per cwt.; lead, both pig and sheet, and spelter, are ¼ to 1 rupee lower; quicksilver has fallen 2 rs. per maund; and tin plates have been sold at ¼ a rupee per box below the rate quoted in our last. The prices of iron remained till within the last few days almost stationary, Swedish bar (selected) being disposed of at 51 rs. per candy, British bar 24½ rs. per candy, sheets 6 rs. per cwt., and nail rod (square) 28 rs. per candy. Swedish bar may now, however, be quoted 49 to 49 rs.; and British bar is offered at 22 to 23 rs. 200 tubs of steel have been sold at rs. 16 19 0 per cwt.

COAL MARKET, LONDON.

MONDAY.—Prices of coals per ton at the close of the market:—Adair's Main 16 6—Chester Main 16 6—Holywell Main 17 6—Lease's Main 14—Ord's Redheugh 15—Pontop Windsor 15—Tanfield Moor 18 9—Townley 16—Wylam 16 3—Blyth 16 6—Cowpen 19—Hartley 19 6—Pantyfynnon Steam Coal 20—Wall's End Farnacre 17 3—Killingworth 17 6—Braddyll's Hetton 20 9—Hetton 20 6—Lambton 20 9—Morrison 17 6—Stewart's 20 6 to 20 9 to 21—Caradoc 21—Hartlepool 20 9—Heugh Hall 20 6—Bowburn 17—Tees 19 9.—Ships arrived, 24.

WEDNESDAY.—Adair's Main 15 6—Chester Main 16 6—Holywell Main 17 6—New Tanfield 14—Old Tanfield 14—Ord's Redheugh 15—Pontop Windsor 15—Ravensworth's West Hartley 17—Tanfield Moor 16—Wylam 16 3—Blyth 16—Howard's West Hartley Netherton 19—South Elton 17—Wall's End Elm Park 16 6—Hedley 17 3—Killingworth 17 6—Braddyll's Hetton 20 6—Haswell 20 3—Hetton 20 3—Lambton 20 6—Morrison 17 6—Russell's Hetton 20 6—Stewart's 20 9—Whitwell 18 9—Caradoc 20 6—Kelloe 20 6—Adelaide 19 9—Barrington Tees 18 9—Bowburn 16 9—South Durham 18 9—Tees 19 9.—Ships arrived, 30.

FRIDAY.—Chester Main 16 3—Holywell Main 17 6—New Tanfield 13 9—Old Tanfield 14—Ord's Redheugh 15—Townley 16—Wall's End Brown's (unscreened) 14—Hilda 17 6—Killingworth 17 6—Todd's Benshaw 13 6—East Hetton 18 3—Haswell 20 9—Hetton 20 6—Lambton 20 6—Morrison 17 9—Stewart's 21—Whitwell 18 9—Cassop 20 6—Caradoc 20 9—Hartlepool 20 6—Kelloe 20 6—Barrington Tees 16 6—Brown's Deanery 18 9—Cowndon Tees 18—Seymour Tees 19 6—Tees Hetton 16 3—Tees 19 9—Blyth 16—Cowpen 18 9—Cloders 22—Hartley 19—South Elton 16 6—Welsh Coal 20.—Ships arrived, 32.

PRICES OF MINING SHARES.

Shares.	BRITISH MINES.	Paid.	Price	Shares.	BRITISH MINES.	Paid.	Price
530	Anglesey	5	—	4,000	Treleigh Consols	5	2¾ 2
4,000	Bedford	1¾	2¼ ¼	6,000	Tamar Consols	3	2¾ 3
4,000	Bissoe Bridge	5	1¾	6,000	Tin Croft	6¼	3¾
100	Botallack	175	300	4,330	Tretoil	1¾	1
20,000	British Iron	70	65dis	170	Treviskey and Barrier	—	210
8,000	Blaenavon	50	11¾	96	Tresavean	—	1350
120	Brewer	—	100	120	Trethellan	—	210
70	Bodnick	—	50	4,000	United Hills	5	6¾
1,000	Carn Brea	—	120	6,000	Wicklow Copper	5	13
2,000	Cornubian Lead Co.	2	4½	3,845	West Wheal Jewel	10	3¾
5,000	Cornwall Great United	10½	1	53	Wheal Vor	500	300
512	Cook's Kitchen	—	50		FOREIGN MINES.		
117	Charlestown	—	430	5,000	Alten Mining Company	13½	8
126	Cregg Brawe	40	420	10,000	Anglo Mexican Co.	100	7
10,000	Durham County Coal Co.	37	9	3,374	Do. Subscription	25	2¾ ¾
2,000	Danescombe	—	2	7,000	Bolanos	150	4
6,000	De Dunstanville	—	—		Ditto Scrip	15	5½
200	Diamond	3½	10	10,000	Brazilian Imperial	21	8¾ 9
128	East Pool	—	380	10,000	Bolivar	20	¾
4,000	East Tretoil	1	¾	10,000	Ditto Scrip	10	7
128	Gavrigan	—	22 ½	10,000	Cata Branca } Brazilian	6½	—
100	Great Consols	97	856	10,000	Concepcion } Co.	4	—
10,000	Hibernian	12¾	7¾	12,000	Cobre Copper Company	40	33¾
1,000	Holmbush	14	45	8,300	Colombian Co. regis.	55	2
2,000	Isle of Sark (Guernsey)	11	8	10,000	Copiapo Mining Co.	13¾	9
80	Levant	—	600	20,000	General Mining Asso.	20	—
20,000	Mining Co. of Ireland	7	13¾	5,351	Mexican Company	58¾	1
128	Mostyn Mines	100	400	12,000	Mocaubas and Cocaes	20	4¾ ¾
5,000	Polberou Consols	10	¾	14,593	{ Real del Monte, regis.	63¾	7¾
2,000	Rollstian	—	¾		{ Do. unregistered	—	3 ¾
5,000	Redmoor Consolidated	5	1¾		Ditto Loan Notes	150	30
10,000	Rhymney Iron	50	9	7,000	Royal Santiago	10	34¾
103	Roswall Hill	100	100	11,000	St. John d'el Rey	15	1¾ 2
800	South Towan	10	1	30,000	United Mexican	40	1¾
64	South Wheal Basset	—	410		Black Scrip, addl. capital	5	1¾
57	Spearn Moor	70	100		Red New Scrip	5	3¾
4,000	Tregullan	4½	¾				

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Line.	Entire Lgth.	Now Open.	Present actual cost.	Pd. on Share.	Val. of Share	Last week's Returns.
Arbroath and Forfar Railway	15	15	£ 131,645	25	22	£190 14 6
Birmingham & Derby Junc.	48	38½	853,044	100	44	1301 11 6
Birmingham and Gloucester	37½	51	1,019,723	100	49	1978 7 5
Brandling Junction	25	25	457,594	45	—	1046 1 11
Chester and Birkenhead	14½	14½	456,004	50	26	550 1 7
Dublin and Kingstown	6	6	359,299	100	77¾	1431 1 11
Dundee and Arbroath	16½	16½	134,934	25	25	291 4 3½
Eastern Counties*	126½	17¾	1,473,170	25	8¾	1136 6 6
Edinburgh and Glasgow	46	46	1,233,234	50	45½ 6	2924 3 2
Glasgow and Ayr	51	40	925,345	45	40	1022 9 6
Glasgow and Paisley Joint	22½	22½	250,000	25	25	969 11 7
Gd. Junc. & Chester & Crewe	113½	113½	2,192,047	100	160	8092 15 10
Great North of England	75	45	1,000,000	100	69	1230 19 2
Great Western	118	118	5,208,044	65	87¼ 7	10082 8 4
Hayle	19	19	125,000	100	—	224 16 6
Hull and Selby	31	31	460,000	50	43	1020 6 6
Lancaster & Preston Junc.	20¾	20¾	350,000	42¾	27¾	467 3 4
Liverpool and Manchester	31	31	1,410,000	100	193	4150 16 10
London and Birmingham	112½	112½	5,734,967	90	176 7	17,272 6 10
London and Blackwall	3¾	3¾	917,000	20	7¾	1250 13 8
London and Brighton	46	46¾	2,008,500	50	35 3¾	4066 11 9
London and Croydon	10¾	10¾	547,302	13½	12½ ¾	431 16 11
London and Greenwich	3¾	3¾	730,303	20	5¾	473 13 8
London and South Western	93	77	2,500,607	38¾	61	7410 11 7
Manchester, Bolton, & Bury	10	10	779,830	50	35	550 6 4½
Manchester & Birmingham	45	5	1,166,512	40	23	319 1 2
Manchester and Leeds	50	50	2,523,500	70	74 5	4426 14 3
Midland Counties	57	57	1,438,000	100	70¾	2740 2 6
Newcastle and Carlisle	60¾	60¾	750,000	100	96	1296 10 6
Newcastle and N. Shields	7	7	239,677	50	44	434 12 5
Northern and Eastern†	32¾	15½	356,914	40	10¾ 49	1054 7 6
North Midland	72¾	72¾	2,939,097	100	60 50½	4494 13 6
North Union	23	23	600,000	75	79¾	1011 16 1
Preston and Wyre	19¾	20¾	279,000	50	30	300 12 3
Sheffield and Manchester	40	7	251,327	32¾	—	251 17 6
South Eastern	92	45	1,575,460	29	23¾ ¾	779 13 9
Ulster	25	6	220,140	22¾	—	426 10 4
York and North Midland	23	25	445,500	50	90	1294 4 11

* Including Northern and Eastern Railway toll. † Road and toll to Eastern Counties (about 150l. per week) included in the returns. ‡ The Liverpool and Manchester toll is deducted.

THE LONDON GAZETTE—BANKRUPTS.

TUESDAY.—E. Poore, Brompton, Devonshire, druggist—J. Smith, Hamsley, Warwickshire, miller—J. Johnson, Manchester, quilting manufacturer—[illegible], Kingston-upon-Hull, merchant—T. Aspinall, Halifax, Yorkshire, worsted spinner—J. Robinson, Dundalk, Louth, commission merchant—G. Bowley, Goole, Yorkshire, coal merchant—G. Bensonthan, South Shields, Durham, sailor—C. [illegible], Birmingham, builder—B. F. Watkinson and W. Haigh, Huddersfield, Yorkshire, woollen cloth dealers.

FRIDAY.—J. Hawkins, Holyport, Berkshire, brewer—J. P. Graves, Mortimer-street, Cavendish-square, auctioneer—J. Harper, Austinfriars, [illegible]—B. [illegible], Red Lion-wharf, Upper Thames-street, coal merchant—G. T. F. Johnson, Warwick, chemist—J. Brocklehurst, Dudley, Worcestershire, mercer—[illegible], Oswestry, Shropshire, ironmonger—B. Wood, Manchester, [illegible]—T. and W. Wilson, Manchester, hat trimming manufacturers—J. Johnson, Manchester, quilting manufacturer—J. Spetham, Framlingham, Suffolk, miller.

London: Printed and Published by HENRY ENGLISH, the Proprietor, at the Office, No. 27, New Broad-street, in the city of London; where all Communications and Advertisements are requested to be forwarded, post-paid. [July 9, 1842.